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National interest suffers from **lopsided** promotion in transportation . . . . . p. 78

September 17, 1962

RAILWAY AGE WEEKLY

How Livingston diesel shop operates

NORTHERN PACIFIC p. 38

Rebuilding freight cars at Laurel

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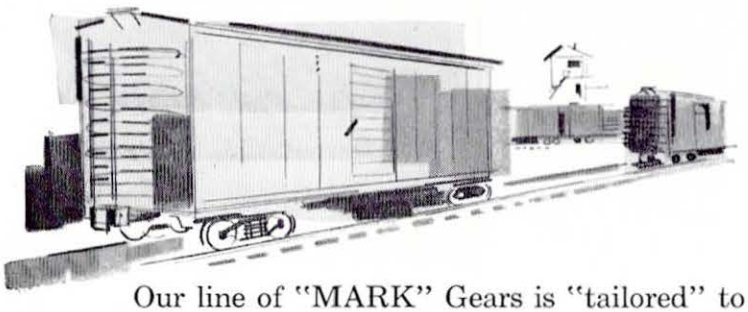

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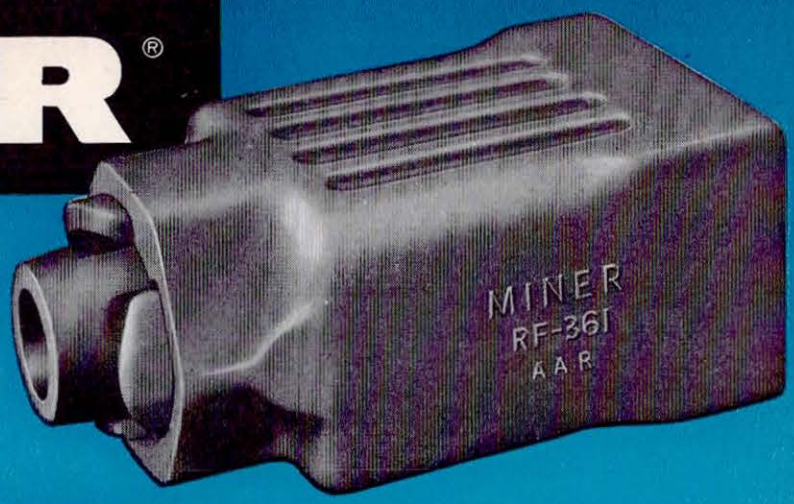

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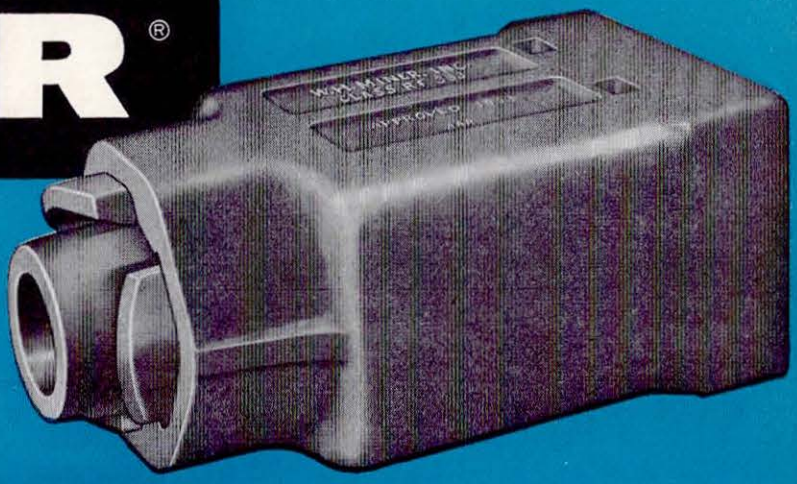

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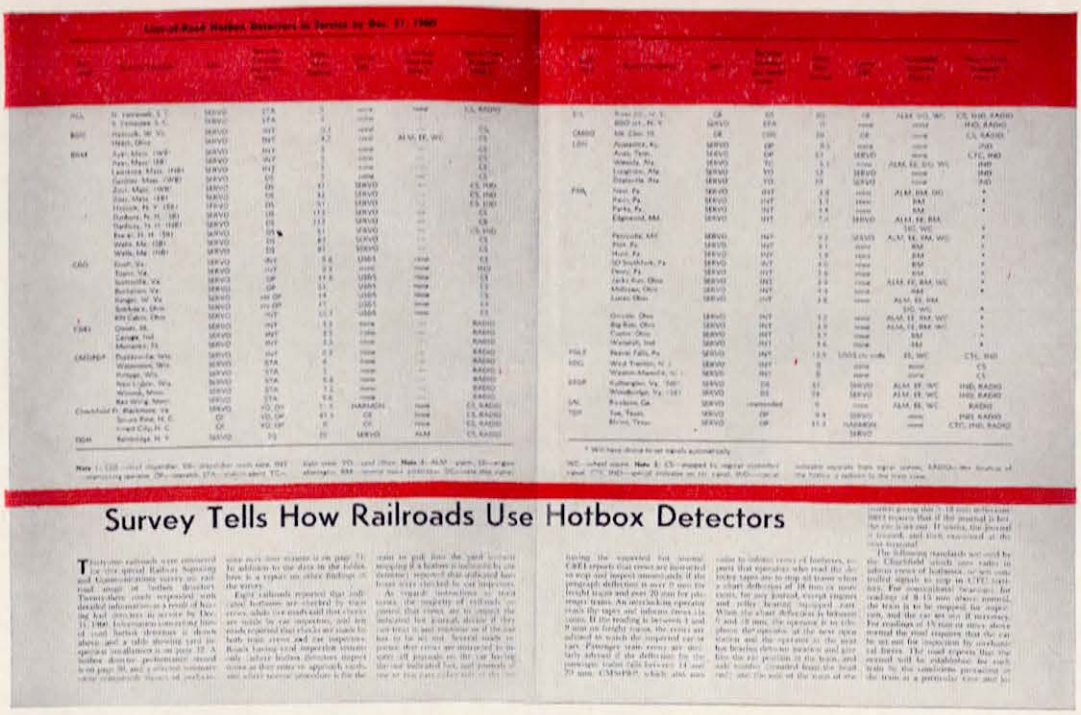

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This booklet gives you the facts and figures that prove no railroad today can afford to be without hot box detectors

We didn't write this booklet. Railway Signaling & Communications did. The hard facts presented in it aren't ours. They are actual figures available from railroads experienced in the use of SERVOSAFE® Hot Box Detectives*. The results speak for themselves. They prove hot box losses can be controlled. The figures can be translated into dollar savings for your road. Every railroadman should have a copy of this booklet. To get yours, write: Railroad Products Division, SERVO CORPORATION OF AMERICA, 111 New South Road, Hicksville, L. I., N. Y.

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RAILWAY AGE

WEEK AT A GLANCE

September 17, 1962 • Vol. 153, No. 12

RRs, ops get set for courtroom fight

The battle over working rules moves into a U.S. Court of Appeals this week, regaining some of the headlines lost in the ORT-C&NW war .....p. 9

New office building improves BRC yard

The Belt Railway of Chicago has speeded up its operations considerably since consolidating all of its 22nd Street north yard offices in one building. p.22

Livingston shop overhauls NP's diesels

Almost half of the road's 622 diesel locomotive units are serviced and maintained at the huge Montana shop, which is close to mid-point of the NP system. p.38

How NP's Laurel shop programs car repair

The shop, one of the Northern Pacific's three heavy freight-car repair facilities, handles program rebuilding of all the road's box cars. p.39

M/W mechanization: The payoff is big

A $1-billion investment is returning $350 million a year, it was brought out at annual meetings of the Roadmasters' and Bridge & Building Associations p.43

Automatic oiler lifts journal box lids

The machine, developed and built by the Great Northern, has already oiled more than 1,200,000 journals at much less cost than that for the previous manual operation. p.54

PRR-Spector start joint Plan V TOFC

The operation, it is expected, will open the way for recapture of traffic lost to private carriers and for retaining traffic now in danger. p.58

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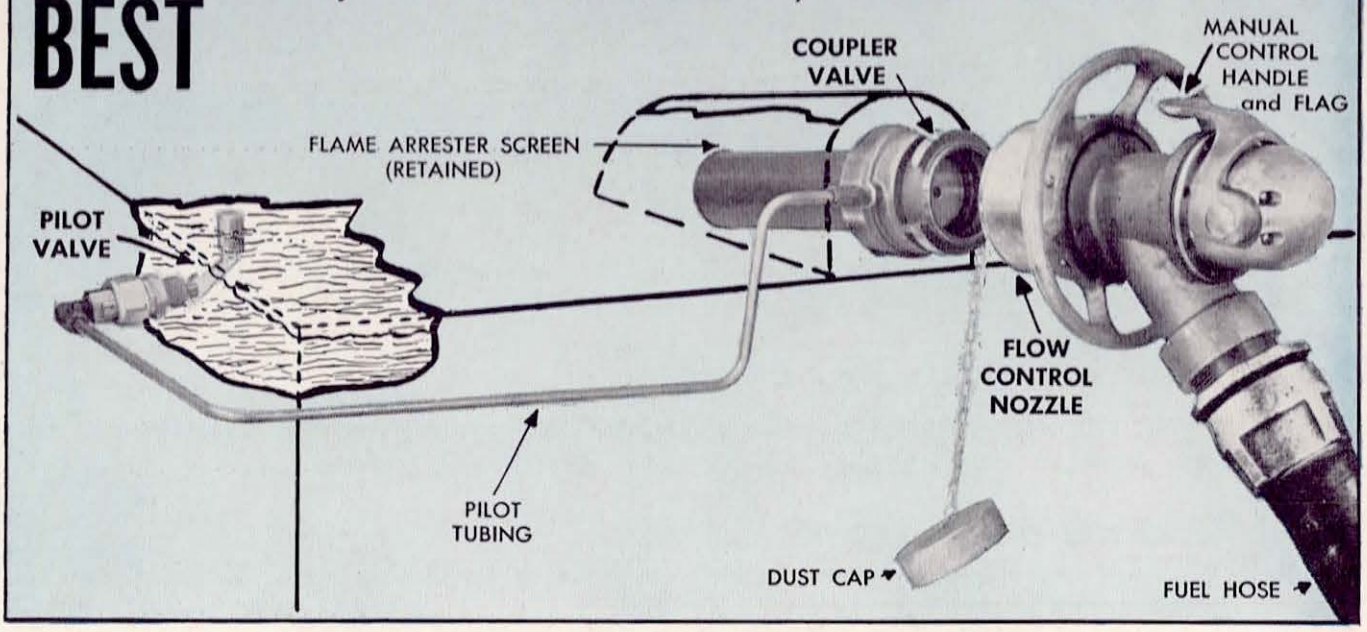

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WEEK AT A GLANCE

The CATS report

A $3.5 million Chicago Area Transportation Study, six years in the making, outlines another plan for a dazzling pattern of highways and expressways. p.59

The Action Page—Lopsided transport promotion

It is hard to imagine a more illogical position than the barge operators' insistence that taxpayers' contributions to their service be not counted as a cost. p.78

Short and Significant

A 2.9% decrease in carloadings . . .

during fourth quarter 1962, as compared with the corresponding 1961 period, is forecast by the Allegheny Regional Advisory Board.

Fines totaling $3,500 . . .

were paid in August by 13 railroads for violations of the Safety Appliance and Hours of Service acts. Biggest payer was the Union Pacific, assessed $600.

C&NW strike plus the holiday week . . .

was blamed by the AAR for a 14.8% decrease in freight carloadings during the week ended Sept. 8, when loadings totaled only 495,286 cars (see p. 71).

The ailing Georgia & Florida . . .

can be made profitable with "careful nursing," Southern President D. W. Brosnan told the ICC as hearings opened last week on Southern's bid to acquire control of the G&F.

Current Statistics

Operating revenues	
6 mos., 1962	$4,703,650,132
6 mos., 1961	4,417,470,000
Operating expenses	
6 mos., 1962	3,713,490,394
6 mos., 1961	3,594,534,970
Taxes	
6 mos., 1962	531,960,577
6 mos., 1961	482,452,262
Net railway operating income	
6 mos., 1962	265,495,659
6 mos., 1961	145,845,950
Net income estimated	
6 mos., 1962	171,000,000
6 mos., 1961	62,000,000
Carloadings revenue freight	
36 wks., 1962	17,792,264
36 wks., 1961	19,245,239
Freight cars on order	
Aug. 1, 1962	13,192
Aug. 1, 1961	10,644
Freight cars delivered	
7 mos., 1962	23,165
7 mos., 1961	20,011
Serviceable cars	
Aug. 1, 1962	1,444,431
Aug. 1, 1961	1,476,781
Cars awaiting repairs	
Aug. 1, 1962	132,811
Aug. 1, 1961	151,500

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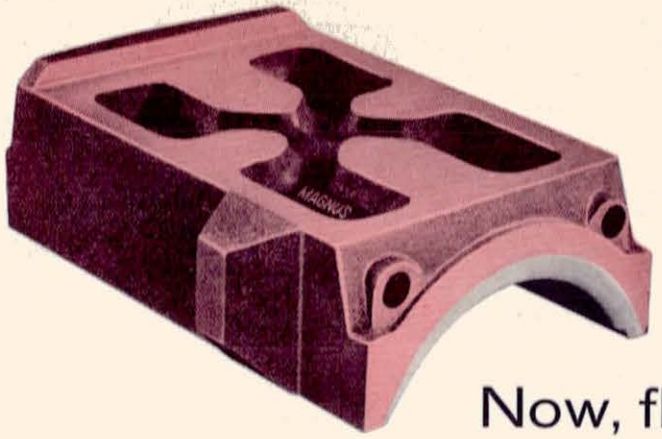

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Railroad Unions Charge 'Gang-Up' On Telegraphers

With their own dispute with the railroads momentarily dormant, the operating brotherhoods—via the RLEA—last week injected themselves into the job-freeze fight between the C&NW and the Telegraphers union.

The entire railroad industry, grand chiefs of the ops charged, is "ganging up" on the striking ORT. But, they quickly added, the alleged en masse attack "is not going to succeed."

Bases of the ops' protest, apparently, were published comments from chief (national) carrier negoitator J. E. Wolfe and AWR President Clair M. Roddewig, which expressed support for the anti-freeze position taken by C&NW Chairman Ben W. Heineman.

The union statement, issued as an RLEA release quoting chiefs of the BLE, BLF&E, BRT, ORC&B and SUNA, charged that "the entire American railroad industry is apparently ganging up against the Railroad Telegraphers who have struck the Chicago & North Western, seeking a fair job-protection agreement. . . The gang-up by the railroads behind Mr. Heineman and against a small group of strikers will not pass unnoticed by the railroad workers of America. And it's not going to succeed.

"Members of our unions employed by the North Western, acting on an individual and voluntary basis, have not crossed the Telegraphers' picket lines."

RRs, Ops Get Set For Courtroom Fight

► **The Story at a Glance: The work rules dispute, nudged from the headlines recently by the Telegraphers' strike against Chicago & North Western, will move front and center again this week in Chicago. Both the carriers and the operating unions will file original briefs on separate appeals taken from U.S. District Court orders dismissing a brotherhood suit seeking to bar rules changes but, at the same time, enjoining the carriers from revising the rules pending settlement of the unions' appeal.**

A month-long lull in the featherbedding fight ends this week. The operating brotherhoods will tell the U.S. Court of Appeals why they believe the carriers should be enjoined from putting into effect sweeping work-rule changes based on the demands served almost three years ago. And the carriers will tell the court why they think a temporary restraining order against them should be dissolved without waiting for disposition of the union's appeal.

Under speed-up scheduling agreed to by the court, the railroads and the unions have until Tuesday, Sept. 18, to file their opening briefs. Replies must be submitted within another 15 days and rebuttal briefs, if any, are due within 10 days after the replies. Use of the full time-limits would bar the scheduling of oral arguments until sometime after mid-October.

The conflicting court cases are the aftermath of unsuccessful negotiating and mediation efforts and the subsequent move by the railroads to place in effect the recommendations of the Presidential Railroad Commission. After a not-inconsiderable inter-union debate, the organization decided to resort to court action to derail the carriers' dogged progress toward rules revision.

Once in court, the carriers—to avoid possible legal technicalities and prevent further delay—withdrew their notice based on the PRC report and substituted their original notices of Nov. 2, 1959. U.S. District Judge Joseph Sam Perry eventually dismissed the amended union complaint—but he also blocked the carriers from making the rules changes until the union complaint could be heard by the appellate court.

Still a possibility, regardless of which way the Appeals Court rules on the basic suit: final decision by the U.S. Supreme Court.

Until the unions took their fight to court, the dispute was headed inevitably for an emergency board. And, barring an ultimate ruling which upholds the union position on the notices, it's virtually taken for granted that an emergency board will be created after the case clears the courts. This would place a further 60 to 90-day delay in effect.

As opposing counsel put the finishing touches on the work rules briefs, the more immediate rail labor crisis—the ORT-C&NW strike—was being subjected to new pressures.

In North Western territory last week, both carrier and union were making strong pitches for public support. And in Washington, top officers of both sides were meeting with incoming Labor Secretary W. Willard Wirtz and Mediator Francis A. O'Neill, Jr., who launched renewed attempts to break the management-labor deadlock.

An initial meeting on Sept. 7 involved Secretary Wirtz, Mr. O'Neill, C&NW Chairman Ben Heineman and ORT President G. E. Leighty. Following this session, Mr. Wirtz issued a statement saying that he and the government mediator had "expressed our conviction that the public interest demands early settlement." He added:

"The matter has now reached the point where any further resort to economic pressure on one side or the other will not change the ultimate re-

WATCHING WASHINGTON WITH WALTER TAFT

• **PLAN II½ PIGGYBACKING** has been sanctioned by the ICC's Division 2. Appeals from this ruling, however, will be considered by the entire Commission which has determined that the issue is one of "general transportation importance." Plan II½, as the Division noted, is an innovation involving ramp-to-ramp service in railroad trailers which consignors and consignees load and unload and haul to and from the railroad ramps. Thus, the service is intermediate between Plans II and III in that it borrows something from each of them. Plan II is complete door-to-door service provided by railroads in their own equipment. Plan III is ramp-to-ramp service with shippers and receivers providing the trailers, performing the loading and unloading and doing the terminal hauling. Division 2's report was in I&S No. 7764. It clears Plan II½ rates which have been in effect since last January for the transportation of iron and steel plates and sheets between Atlanta and St. Louis.

THE PLAN II½ RATES apply on 45,000-lb loads. They are about 45% less than comparable Plan II rates which apply in connection with a 22,000-lb minimum weight. For shipments in box cars, where the minimum is 40,000-lb, the comparable rate is 78 cents. Plan III rates are not published on the cents-per-100-lb basis—they are on per-car basis.

MUCH OF THE TRAFFIC AT STAKE had been moving by private trucks, but for-hire truckers had some of the business. The Division's favorable decision was based on evidence indicating that the Plan II½ rates were necessary if the railroads were to participate in the movement. Plans II and III and box-car rates were not selling the railroad service.

THE ONLY PROTESTANT was Southern Motor Freight Tariff Association which succeeded in getting the Plan II½ tariff suspended. In less than a month, however, the Commission vacated that suspension order, but continued the investigation out of which Division 2's report came.

ONE FEATURE of the Plan II½ tariff was condemned by the Division. That's the rule which permits consignees and consignors to make arrangements whereby they can move the trailers beyond terminal areas described in the tariff. Among other objections, the Division said the rule constituted a "possible source of illegal rebating."

THE CONDEMNATION represented the view of Division Chairman Freas and Commissioner Herring. The Division's other member, Commissioner Webb, called the condemnation a "futile gesture." As to clearance of the Plan II½ rates, Mr. Webb agreed with his colleagues.

THE DIVISION'S DETERMINATION is "without prejudice to the adoption of any different findings or conclusions which may be indicated in the light of the conclusions reached in Ex Parte 230," the report said. Ex Parte 230 is the comprehensive investigation of piggybacking which the Commission now has under way (RA, Sept. 10, p. 44).

• **MERGER OF ALL EASTERN MERGER CASES** is now sought by the Delaware & Hudson. In an amended petition, it has asked the ICC to consolidate for decision the Pennsylvania-New York Central, Norfolk & Western-Nickel Plate-Wabash and Chesapeake & Ohio-Baltimore & Ohio cases. The original petition asked for consolidation of the PRR-Central and N&W-NKP-Wabash cases. D&H wants to be included in the proposed N&W system.

sult. It is time to assert the public interest. We have said that there is a real advantage in settling now in accordance with established procedures of the Railway Labor Act. It is virtually certain that a settlement reached now would be the same as one reached later. There is no need to wait."

In reply to a question, Mr. Wirtz said the recommendations of the emergency board "are obviously a proper guide for settlement."

Mr. Wirtz then bowed out of the talks, at least temporarily, and mediation efforts were resumed by Mr. O'Neill on a day and night basis. As the week waned, there was no apparent progress though Mr. O'Neill said he was hopeful of a settlement.

The ORT, meanwhile, planned a broad distribution—to shippers, the press, politicians and the public generally in C&NW territory—of a two-page statement of the union position (essentially a denial that union demands constituted a job freeze and a veto power over management decision-making, plus a declaration that ORT was willing to settle for something less than its original proposal).

The "something less" was the 2% maximum annual job reduction formula agreed to by Southern Pacific.

Mr. Heineman, on seeing a copy of the ORT statement in Washington, said he would comment only on its call for settlement on the SP basis. That basis, he said, was urged upon the C&NW emergency board, which turned it down unequivocally after full consideration.

A further development involved the ICC, where petitions were received asking the Commission to order resumption of services on the Minneapolis & St. Louis division of the North Western. Among the petitioners were several unions, including the ORT. The petitions were based on a provision of ORT's strike call which specifically exempted the Telegraphers on the M&StL division.

NE, Atlantic Shipper Boards Set Meetings

Fall meetings of the New England and Atlantic States Shippers Advisory Boards will be held, respectively, at Mt. Washington Hotel, Bretton Woods, N.H., Sept. 27-28, and Pocono Manor Inn, Pocono Manor, Pa., Oct. 2-4.

Highlight of the New England board sessions will be a Sept. 27 banquet address on "The Future of Railroad Service in Southern New England" by Richard Joyce Smith, one of the trustees of the New Haven.

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In General Steel's inspection of over 12,500 box cars, it has been found that only 17.7% of the underframe failures are in the center sill, center plate and draft sill area. The remaining 82.3% of the failures occur in the bolster-center sill area.

This underlines the need for the proper end casting for each application. General Steel's engineers recommend the one-piece draft sill casting for cars in which the buff or pull is transmitted directly through the center sill, such as on hopper cars. We do not recommend it for all applications.

For box cars and refrigerator cars—where the buff or pull is transmitted through the side sills as well as the center sill—General Steel recommends the cast steel underframe end, to eliminate failures in the critical bolster-center sill area, as well as in the center sill, center plate and draft sill.

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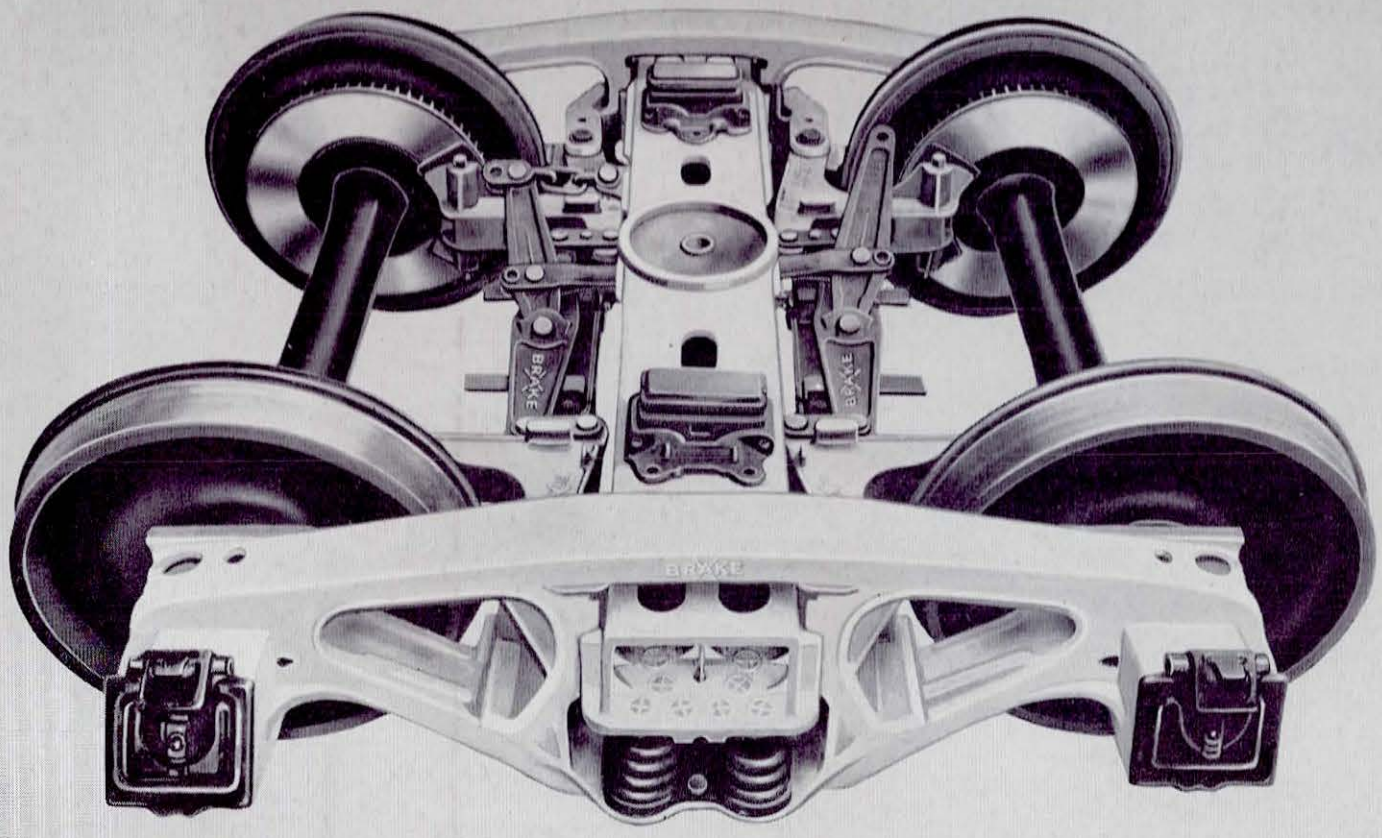

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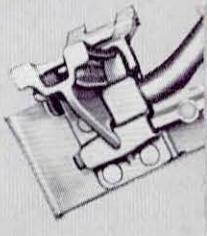

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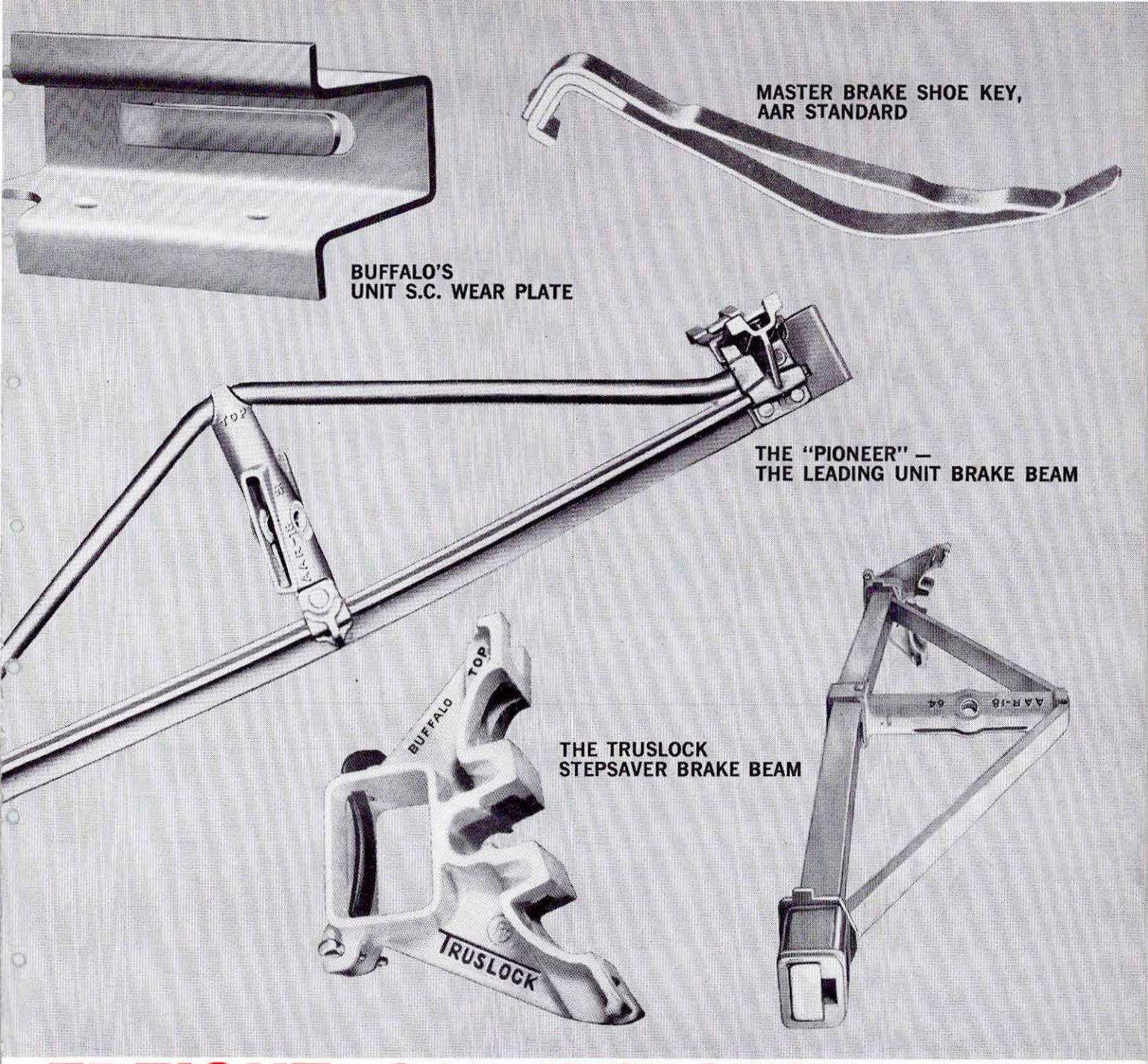
first... **Buffalo's Pioneer, the original** hangerless type brake beam. Buffalo-Unit's Solid Truss Brake Beam is designed to deliver the greatest operating economy and braking performance. Offers simplicity of design, interchangeability of all parts, reduced repair costs. The leader for 25 years – now in use the world over.

first... **Buffalo's Truslock Stepsaver** – the first brake beam with a quick-change head. Saves you up to 50% in brake beam reclamation costs on all hanger-type freight car trucks. Truslock heads slip on and off without special tools – without dismantling the brake beam.

first... **Buffalo's Master Brake Shoe Key, AAR Standard.** A super performance spring key with a unique design for insuring brake shoe security under every operating condition. Prevents brake head toe and lug wear.

first... **Buffalo's Unit S.C. Wear Plate** – the only self centering side frame wear plate. Designed and produced by Buffalo-Unit for Unit trucks to fully utilize the balanced operating characteristics of the Unit Brake Beam.

first... **Buffalo's Brake-X** – a mechanically operated, single disc, off-wheel freight car brake, now setting new records for continuous repair-free service on 19 railroads and private car lines.



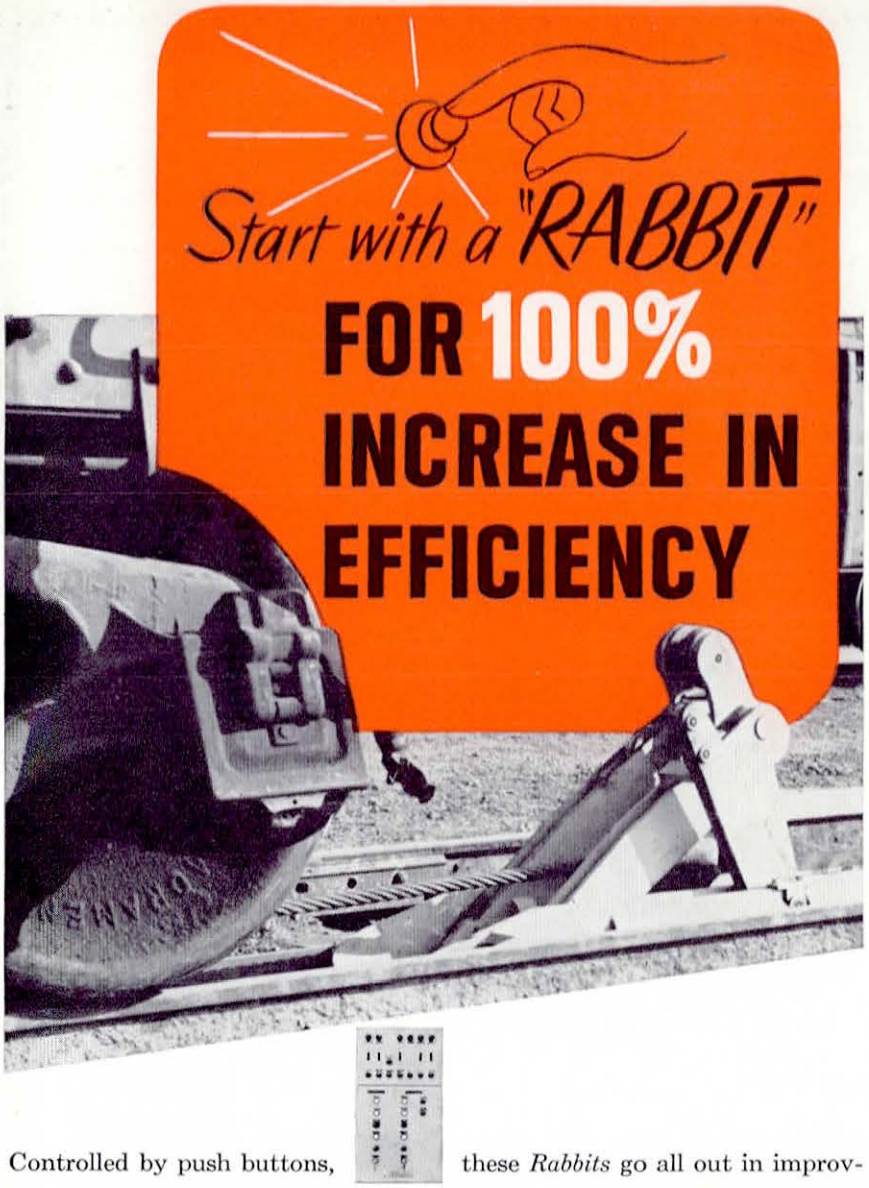
FREIGHT CAR "FIRSTS"

Today's great advances in special cars and special services for shippers will pay you the *biggest* returns when you couple them with the remarkable trouble-free service of Buffalo's Brake-X... proven in more than 13,000,000 miles of the most strenuous, high speed operation. Complete descriptive data, service records and Brake-X costs on request. Write to:

BUFFALO BRAKE BEAM COMPANY

140 CEDAR STREET, NEW YORK 6, N. Y.

Plants at BUFFALO, N. Y. and HAMILTON, ONTARIO



Controlled by push buttons, these *Rabbits* go all out in improving labor efficiency! They deliver cars safely where and when you want them—with little maintenance and no wasted manpower. With 44 rabbit-equipped repair tracks now in service, this system offers these money-saving advantages: (1) At least 100% increase in labor efficiency. (2) Profits on AAR Billings. (3) Reduction in per diem costs. (4) 50% to 90% savings on switch engine hours. *May we discuss the car handling efficiency with you—involving either separate components or the complete system?*

RMC **Spot Car Repair Systems**

Railway Maintenance Corporation
Box 1888 • Pittsburgh 30, Pa.

Safety Program Pays Off on Soo Line

A safety program tailored to signal and communication departments needs has rewarded Soo Line employees for adhering to its practices. "During a period of more than five years, not one reportable accident occurred in the signal department," reports B.F. McGowan, assistant chief engineer, signals and communications.

Five accident-free years

"The communications department record is almost five years without an accident or injury to an employee. These records were maintained during heavy construction programs, employing many new and inexperienced men. Very important too, in our opinion, is the issuance of letters of commendation to construction crews and maintenance forces for good safety records," comments Soo Line's signal and communications officer.

"We have a book of safety rules and first aid instructions for maintenance of way and structures—signal and communication employees," Mr. McGowan says. "Twenty-two pages are devoted to signal and communication safety rules. Nine additional pages cover safety requirements connected with the operation of automobiles, trucks and motor vehicles, applicable to all maintenance of way employees. Seventeen pages of first aid instructions prepared by the chief surgeon must be studied by each employee.

"Monthly safety meetings are held at designated points throughout the railroad system. The meetings are usually conducted by operating superintendents or a staff officer.

"The safety department furnishes safety records by departments; also graphic charts, photos and motion picture material.

'Safety-minded personnel'

"Signal and communication supervisory personnel are aggressively safety-minded. This attitude prevails throughout the departments. We find that talking and demonstrating safety daily by our supervisory staff is the most effective safety measure we can take."

A signal department safety program on the Richmond, Fredericksburg & Potomac has also been effective. The Richmond signal gang has chalked up a record of 2,341 safe work days, reports V.P. Shepardson, assistant chief engineer—signals and communications.

PRESTRESSED RAILWAY BRIDGES COME OF AGE

The Chicago, Burlington and Quincy began operating trains over the nation's first prestressed concrete railway bridge in 1954. In the next 8 years, 20 more railroads placed prestressed bridges or trestles in service. Many more are in the planning and construction stages.

Here are some of the advantages of prestressing:

1. Economically combines the best properties of two major construction materials—the high compressive strength of concrete and the high tensile strength of prestressing steel.

2. Reduces depth of superstructure, thus providing greater underclearance.

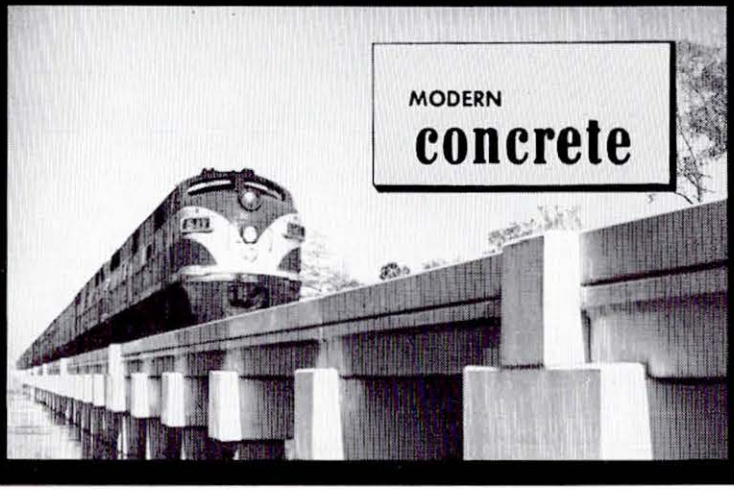
3. Makes it possible to greatly increase economical span lengths that can be designed to fit a variety of bridge requirements.

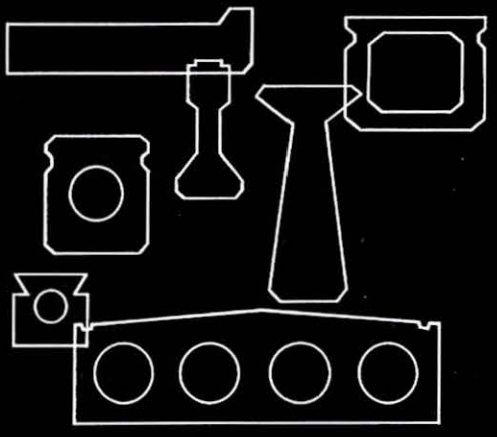
4. Automatically proof-tests a member because under maximum conditions of loading the stress in the steel and concrete will seldom exceed that produced by the initial prestress.

Box sections, I- and T-beams, hollow slabs, piles – bridge members of all types – have been used and are now readily available from over 250 prestressing plants which stand ready to serve you.

Write for free information on prestressed railroad bridges, list of prestressed concrete manufacturing plants and bridge design aids. (U.S. and Canada only.)

PORTLAND CEMENT ASSOCIATION
Dept. 7e-26, 33 W. Grand Ave., Chicago 10, Illinois
A national organization to improve and extend the uses of concrete





Rapid Transit's on the move with light, fast cars of Allegheny Stainless

Rapid Transit is on every tongue. Growing importance of the city as the commercial, civic, employment and cultural center *demands* fast, economical ways to reach it from the suburbs.

Stainless steel transit cars are truck-deep in this trend. Stainless cars are naturally good looking, attractive and bright. They stay that way, too, with virtually no exterior maintenance. Being stainless steel, they're strong, yet light—much lighter than conventional cars—holding down power costs, speeding up service.

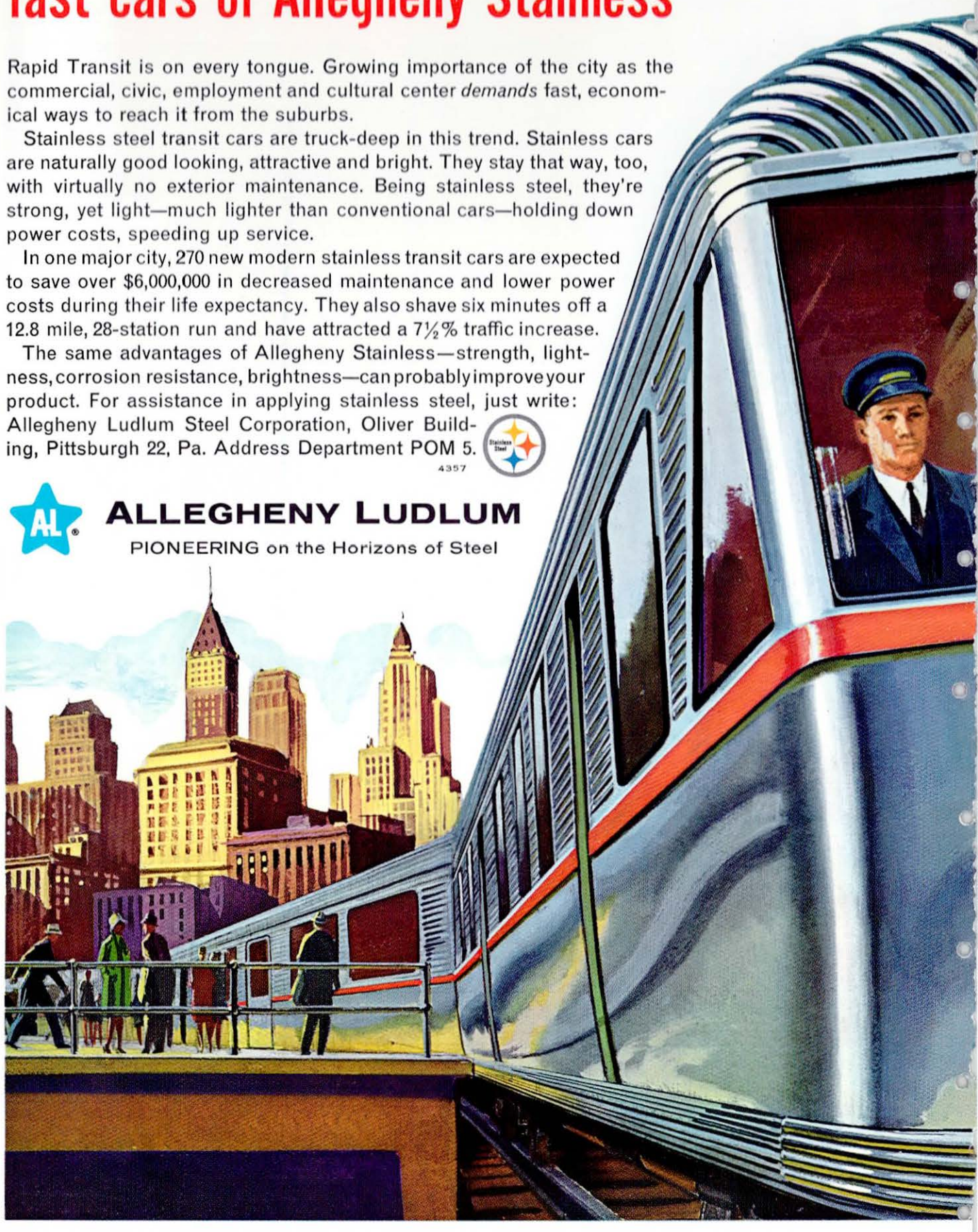
In one major city, 270 new modern stainless transit cars are expected to save over $6,000,000 in decreased maintenance and lower power costs during their life expectancy. They also shave six minutes off a 12.8 mile, 28-station run and have attracted a 7½% traffic increase.

The same advantages of Allegheny Stainless—strength, lightness, corrosion resistance, brightness—can probably improve your product. For assistance in applying stainless steel, just write: Allegheny Ludlum Steel Corporation, Oliver Building, Pittsburgh 22, Pa. Address Department POM 5.

4357

ALLEGHENY LUDLUM

PIONEERING on the Horizons of Steel



SOUTH

"Bud" Mowers, SKF Railway Sales Engineer, explains:

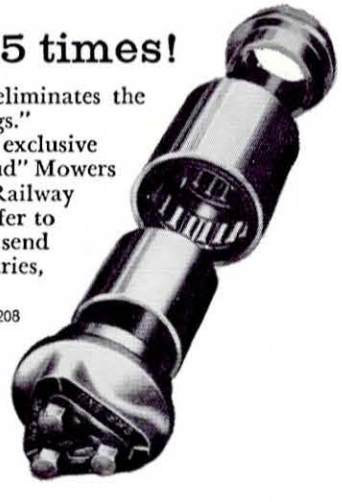
Why most railroads have already re-ordered "EXPEDITER" Bearings up to 5 times!

"Why so many re-orders on 'Expediter' bearings? Two good reasons:

"76% lower inventory costs. With SKF 'EXPEDITER' bearings, axle wheel sets can be stored with only the enclosure collars and inner races on the journals.

"A 70% to 90% cut in average inspection time. The 'EXPEDITER' is the *only* freight car roller bearing you can inspect and service without a wheel press. This easy-off, easy-on feature eliminates the major problem in using roller bearings."

See a demonstration of the many exclusive "EXPEDITER" features—contact "Bud" Mowers in New York or call the SKF Railway Sales Engineer near you. If you'd prefer to write, rather read than watch, we'll send you literature. Write to SKF Industries, Inc., Front Street and Erie Avenue, P.O. Box 6731, Philadelphia 32, Pa. 6208



GEARED TO PROGRESS P R I MEMBER

SKF MOTION ENGINEERING

Advanced ball and roller bearing technology

Why Not Automated Food-Vending Cars?

To the Question and Answer Editor:

I recently completed a tour of the western states, acting in the capacity of "Tour Escort" for a group of 17 people, most of whom were at or near retirement age. We traveled by rail the entire trip, using some of the best trains now operating in the West.

The western lines have excellent equipment. While dome cars and leg rest coaches came in for their fair share of favorable comment, I noticed a very high amount of interest in the Southern Pacific's automated coffee car on the "San Joaquin Daylight."

"The Automat," as it became known to my tour members, is a lightweight streamlined ex-open section sleeper, modified for use as a self-service diner. The center section contains a group of vending machines which dispense coffee, hot water (for tea), hot chocolate, milk, soda, sandwiches and dessert, including ice cream, pie and cake. Individual cans of soup, chile con carne, chicken and noodles, and other similar items form the hot dish department, the cans being dispensed from behind glass doors which open automatically upon the deposit of the proper coins. The diner receives his choice of canned food at serving temperature and a conveniently placed can opener and stack of paper plates are available for his use. Knives, forks and spoons are made of disposable plastic.

Seating space is at either end of the car; in one end the sections have been retained and permanent tables placed between each pair of facing seats. In the other end, the aisle is to the side, and passengers sit on leather upholstered individual stools at counters attached to bulkheads placed crosswise in the car.

One attendant serves the entire car, assisting passengers at the machines, making change when necessary, keeping the machines stocked with food, and clearing tables and counters. The car is open during the entire "Daylight" trip and the advantages to the passengers are many. One can eat at any time he pleases, have a small meal, a snack, or even just a cup of coffee or tea without feeling that he is taking up regular dining car space at the expense of the other passengers. Prices are moderate and, of course, there is no tipping.

Apparently there are also advantages to the railroad. The attendant in charge of the car on our run claimed that the cars are definitely operating at a profit. If this is true, it is certainly in contrast to the report of dining car operations Railway Age recently published.

This type of dining car operation seems to be ideal for the short, daylight runs so numerous in the East, particularly between Boston and New York, and New York and Washington. Do the eastern lines plan to experiment with something on this order, and if not, why not?—*Richard B. Benedict*

A forum for railroaders who want to explore questions of importance to their industry, this department welcomes both questions and answers from readers at all levels of responsibility in the industry and associated fields. We'll pay $10 to any reader submitting a question that forms the basis for a column discussion. Address correspondence to Question and Answer Editor, Railway Age, 30 Church St., New York 7, N.Y.

What Questions Do You Like to See?

To the Question and Answer Editor:

As a long-time reader of the Current Railroad Questions department, I am surprised that more readers do not take advantage of the forum you offer to discuss some of the controversial aspects of our industry.

For example, since the first of this year, your department has discussed: moving bulk in integral trains; measurement of ballast tampers; piggyback for private autos; an escrow fund for maintenance; whether or not off-line extensions of TOFC are practical; whether carload rates on private cars should include a mileage allowance; whether computers should be used to program repair cycles more efficiently; what the proper transit role should be for railroads; whether there should be expanded use of commissions for travel agents; whether the government should stockpile Slumbercoach cars for use in a national emergency—and in the meantime, lease them to passenger carriers; whether there should be tickets available for foreign travelers offering unlimited travel for a fixed period of time at a flat rate; and how car utilization can be improved.

Other questions that I would like to see discussed are: the use of Plan V piggyback by one railroad to invade another's territory, and why one railroad needs to assign a train crew to a maintenance gang while another does not. What do your other readers think? —*These comments were submitted by an eastern railroader who prefers not to be otherwise identified.—Editor*

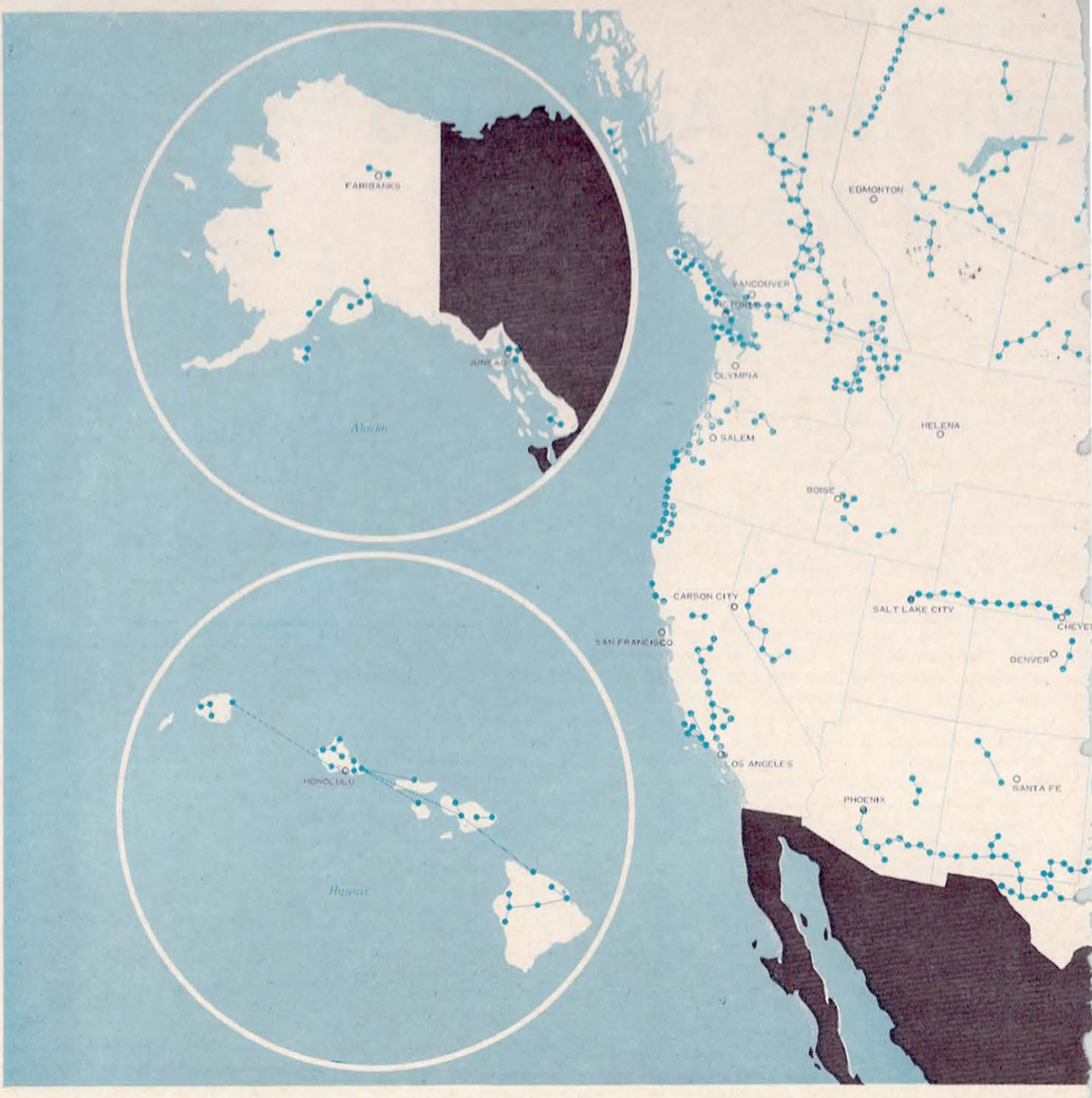
Use Smoke to Signal Excessive Impacts?

To the Question and Answer Editor:

Despite the appeals, slogans, posters, meetings, etc., directed to rail crews, the incidence of damage claims stemming from rough car handling continues at a high level. Because the men who mishandle rail cars are usually not aware of the damage caused by their carelessness, they may readily adopt the attitude that someone else, not they, creates the heavy impacts which result in damaged freight and claims for the same.

Why not apply a device to rail cars which would operate like an impact recorder, but instead of recording the times and the intensities of shocks, it could be pre-set to emit a quantity of vile-smelling smoke if an impact of a certain dangerous level occurred? The combination of stench and smoke could have several beneficial effects. It would identify the parties responsible for the rough handling. It would put them on notice that they might have caused some damage with a resultant claim. It might induce crewmen who repeatedly cause overspeed impacts to handle cars more carefully. It might reveal the presence of latent defects in equipment or tracks which cause damage, apart from human errors.

A simple small charged gas cartridge, such as is used on small fire extinguishers, could do the trick.—*M. B. Ketter, Pinole, Calif.*



Lenkurt radio and microwave covers thousands

Throughout North America (and in 19 countries around the world), Lenkurt radio and microwave systems are appearing in ever-increasing numbers. Three distinct systems fill the need for a variety of services, from video and voice to data transmission.

For LOW DENSITY needs, the 71-class radio equipment provides toll grade service for up to 48 multiplex v-f channels.

For MEDIUM DENSITY service, the 74-class microwave equipment, with a capacity of 300 or more channels, is large enough to serve as the backbone communications system of almost any company.

# of route miles in the U. S. and Canada

For HIGH DENSITY conditions, the solid-state 76-class microwave equipment accommodates 600 or more carrier-derived voice channels, a color TV channel or the equivalent in other forms of communication.

You can obtain further information on these Lenkurt systems, and on the complete customer services which support them, by contacting your Lenkurt representative. Lenkurt Electric Co., Inc., San Carlos, California. Offices in Atlanta, Chicago, Dallas, Minneapolis, New York and San Carlos.

Specialists in VIDEO, VOICE and DATA TRANSMISSION

LENKURT ELECTRIC

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GENERAL SYSTEM

YARDMASTER'S CONSOLE has keys and indication lamps for talkback speaker circuits. He also has intercom to various offices in the new yard office building (left). Paging speakers are mounted on the floodlight tower, while talkbacks are along the 22nd Street yard's north and south switching leads.

OPERATION SPEED-UP—21

New Office Building Improves BRC Yard

"Scattered all over the lot" aptly described the office situation at the Belt Railway of Chicago's 22nd Street north yard. Maintenance of way, car department, diesel locomotive fueling facilities, trainmen's locker-room, electricians' shop, clerical and yardmaster's offices were, for the most part, in separate buildings at various locations about the yard. Time was consumed walking from office to office and coordinating operations with each department.

To speed up operations, BRC management decided to consolidate all offices in one building. A one-story brick building, with a 3-story section at one end to house the yardmaster's office on the top floor, was constructed. Because a substantial section of his office contains windows, the yardmaster has a good overall view of the yard, enabling him to better oversee its operation. The new building is alongside the diesel fuel facility and adjacent to one of the switching leads.

A modern communications system was installed as part of the office consolidation. To provide communications between the yardmaster and switch crews, a talkback speaker was installed. Four talkback speakers were strategically located along the north switching lead, and a like number were also placed along the south switching lead. The speakers, mounted in pairs facing in opposite directions parallel to the yard leads, are atop pipe masts about 6 ft high. Each speaker pair has a push-button which, when pressed, signals the yardmaster by lighting a lamp on his communications console and actuating a buzzer. He answers by operating a key on the console associated with the lighted lamp, depresses a footswitch and speaks into a microphone. In addition to the talkback speakers along the switching leads, two paging speakers were mounted on floodlight towers. A single talkback speaker was located by the diesel fueling facility to handle communication between that point and the yardmaster.

An intercom system was installed to connect the yardmaster and the car department office, the clerical office and the trainmen's locker room. BRC and Milwaukee Road dispatcher's circuits are also brought into the yardmaster's console.

While the talkback speaker system might be considered a minimum, the system was engineered for expansion, if desired. Additional talkback speakers can be added to each wire pair now going to each talkback speaker location. With several talkbacks on the same pair, the yardmaster's voice would be heard on all speakers (this practice is often known as group paging). However, he would receive and answer from only that speaker at which a person's voice was directed.

By consolidating several scattered offices into one building, at its 22nd Street north yard, the Belt Railway of Chicago has provided better coordination of operations, which is resulting in better service to shippers.

You wouldn't take the "local," if you could take the "express," so why buy a microwave system that handles your through-traffic as though it were local traffic. The new RCA CW-60 *Total* Solid State Microwave provides an "express" route for through-channels via heterodyne repeater stations for consistently low intermodulation and high-level stability. When you specify HETERODYNE you eliminate remodulation distortion inherent to systems using back-to-back terminals as repeaters. With heterodyne operation, you get sharper, clearer reception every time . . . no garbled or distorted messages! There's no need for channel regulators either since level stability is inherent with a heterodyne design.

The CW-60's Total Solid State Design means no tubes to replace, no frequency stability problems to plague you. Battery operation assures continuity even in the event of a power interruption. Best of all, the CW-60 is competitively priced with "transistorized" equipment using klystrons.

Send for new Picture Story of CW-60 Total Solid State Microwave or contact your RCA Microwave Representative.

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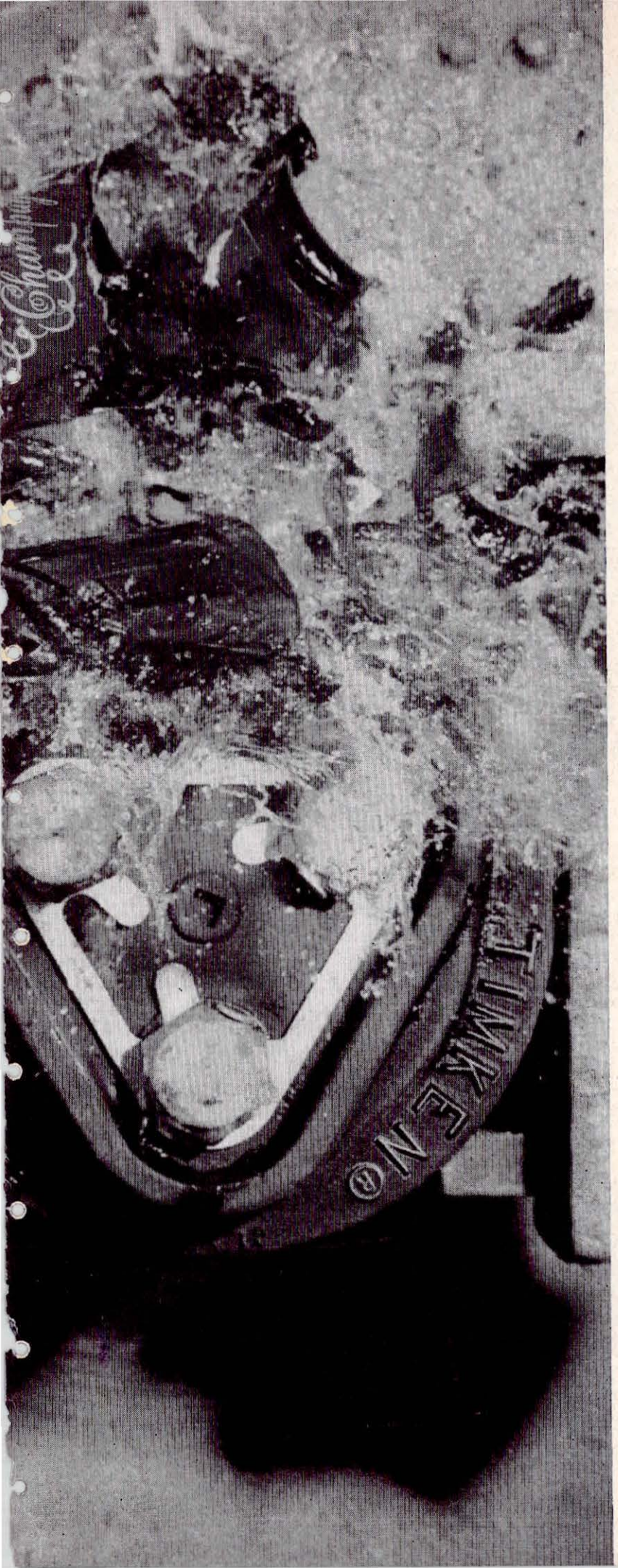
CW-60 TOTAL SOLID STATE MICROWAVE

The Most Trusted Name in Electronics

RADIO CORPORATION OF AMERICA
Microwave Equipment, Dept. MC-246
Building 15-5, Camden 2, N. J.

☐ Please send me the new CW-60 Total Solid State Microwave Brochure.
☐ Have RCA Microwave Representative contact me.

NAME_____ TITLE_____
COMPANY_____
ADDRESS_____
CITY_____ ZONE_____ STATE_____

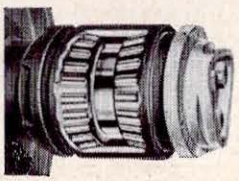


100,000

The 100,000th Timken® bearing-equipped freight car recently was launched. And if this seems like a drop in the bucket compared with the 1,900,000 freight cars on the railroads today, consider this: just in the past 5 years, new cars equipped with roller bearings jumped from 10% to 75% of those ordered—and a majority of them went on Timken tapered roller bearings.

The trend to "Roller Freight" is picking up speed and momentum like a crack cross-country express. There is good reason. Timken bearings solve the hot box problem. They roll over one hundred million miles on the average between car setouts due to overheated bearings. Timken bearings keep cars in service and cut operating and maintenance costs to the bone. And they reduce inspection time drastically—cut lubrication costs, too. It's the result of precision manufacture from nickel-rich steel—the quality that's built into Timken bearings to give top performance.

Every railroad has profited from "Roller Freight" cars through interchange. Many railroads and other freight car owners are now putting practically all their new freight cars on roller bearings and Timken "AP" bearings are leading the way. When all freight is "Roller Freight", America's railroads will save millions in maintenance and operating costs. The Timken Roller Bearing Company, Canton 6, Ohio.

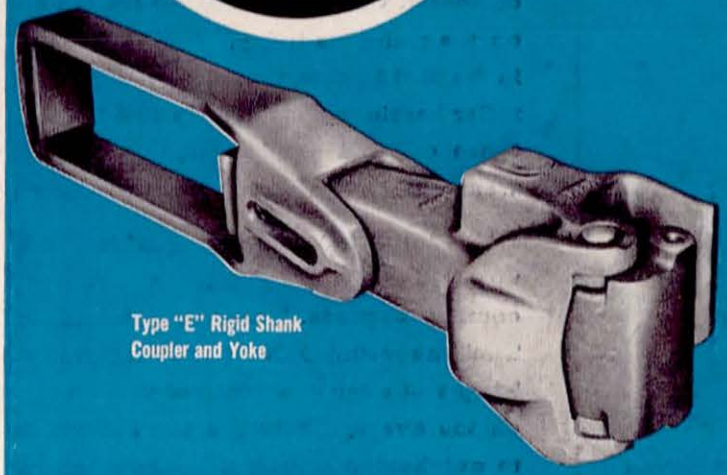


QUALITY TURNS ON HEAVY DUTY

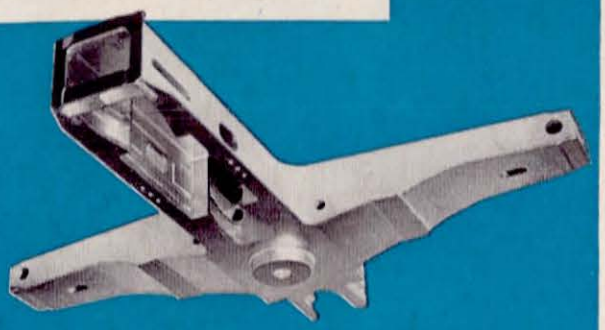
TIMKEN®

TAPERED ROLLER BEARINGS

...TRADE MARK OF
DEPENDABILITY SINCE 1902

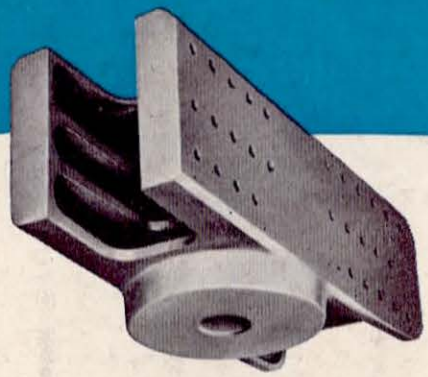


Type "E" Rigid Shank
Coupler and Yoke

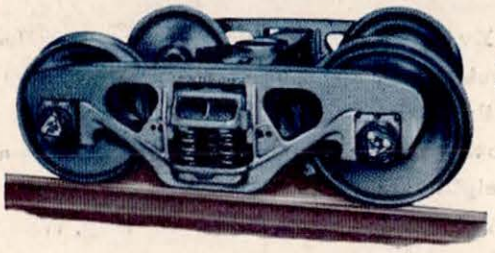


One Piece
Underframe End

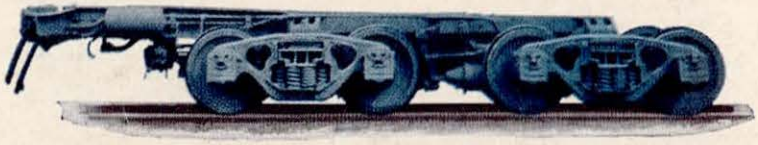
Buckeye Cast Steel COMPONENTS



Bolster Center Filler with
Integral Center Plate

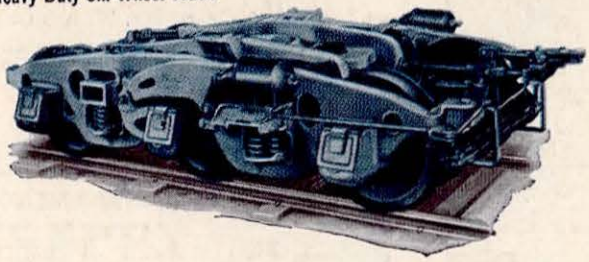


C-R (Cushion-Ride) Truck
with Roller Bearings



Heavy Duty Eight-Wheel Truck

Heavy Duty Six-Wheel Truck



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Refer Adv. No. 11886

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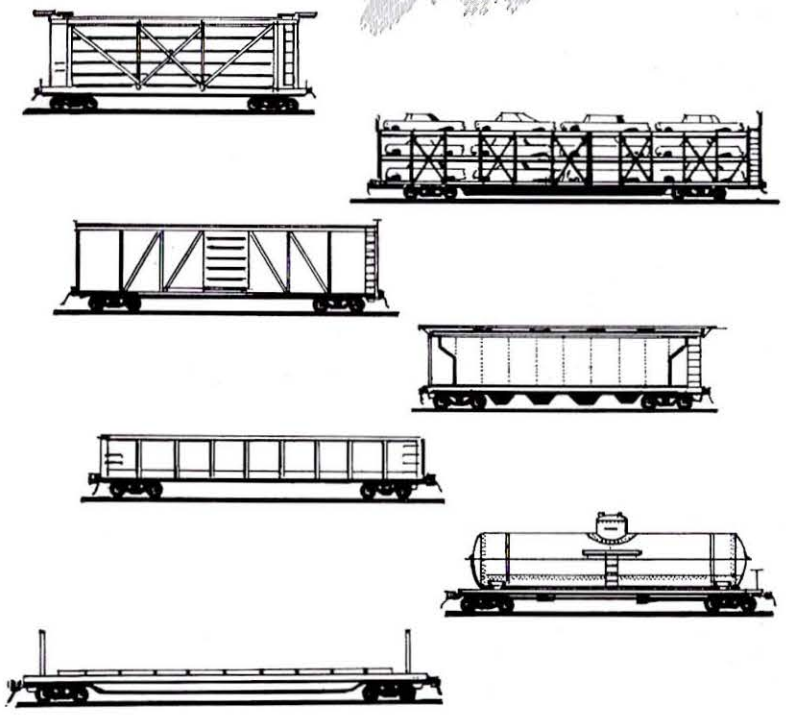

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Staffed, Experienced and Equipped to Design and Build Conventional or Special Purpose Cars of All Types.

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We Welcome Your Toughest Problems!

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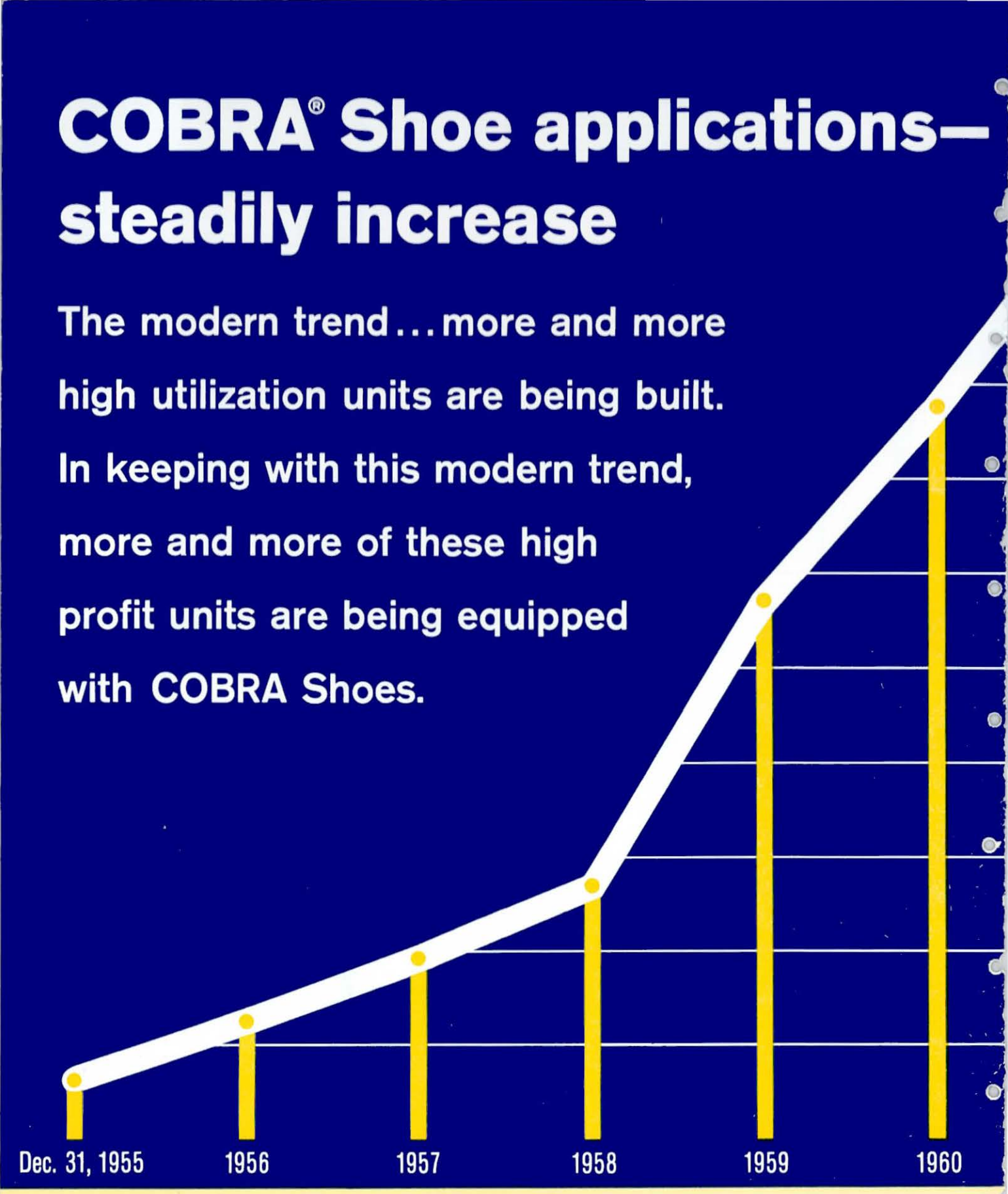
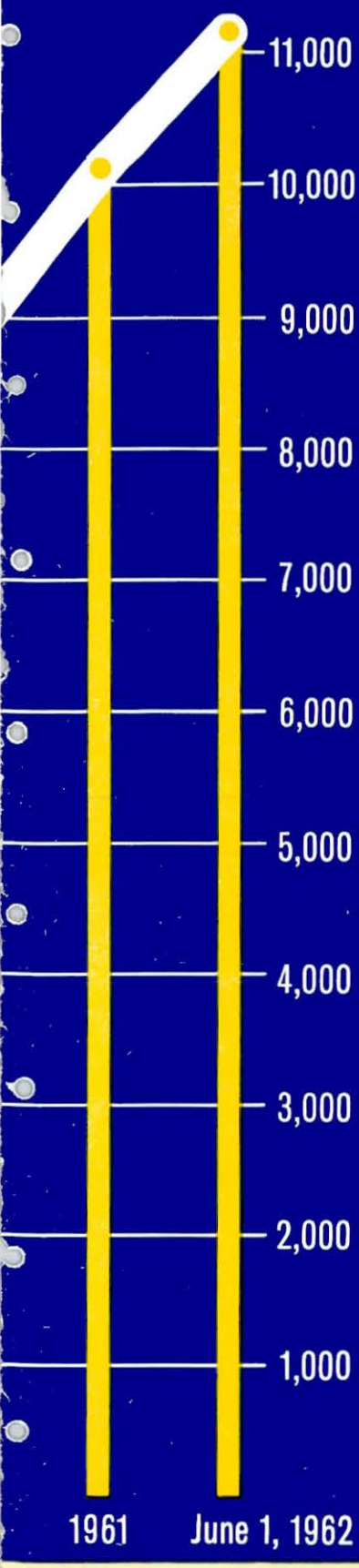
COBRA® Shoe applications—steadily increase

The modern trend... more and more high utilization units are being built. In keeping with this modern trend, more and more of these high profit units are being equipped with COBRA Shoes.

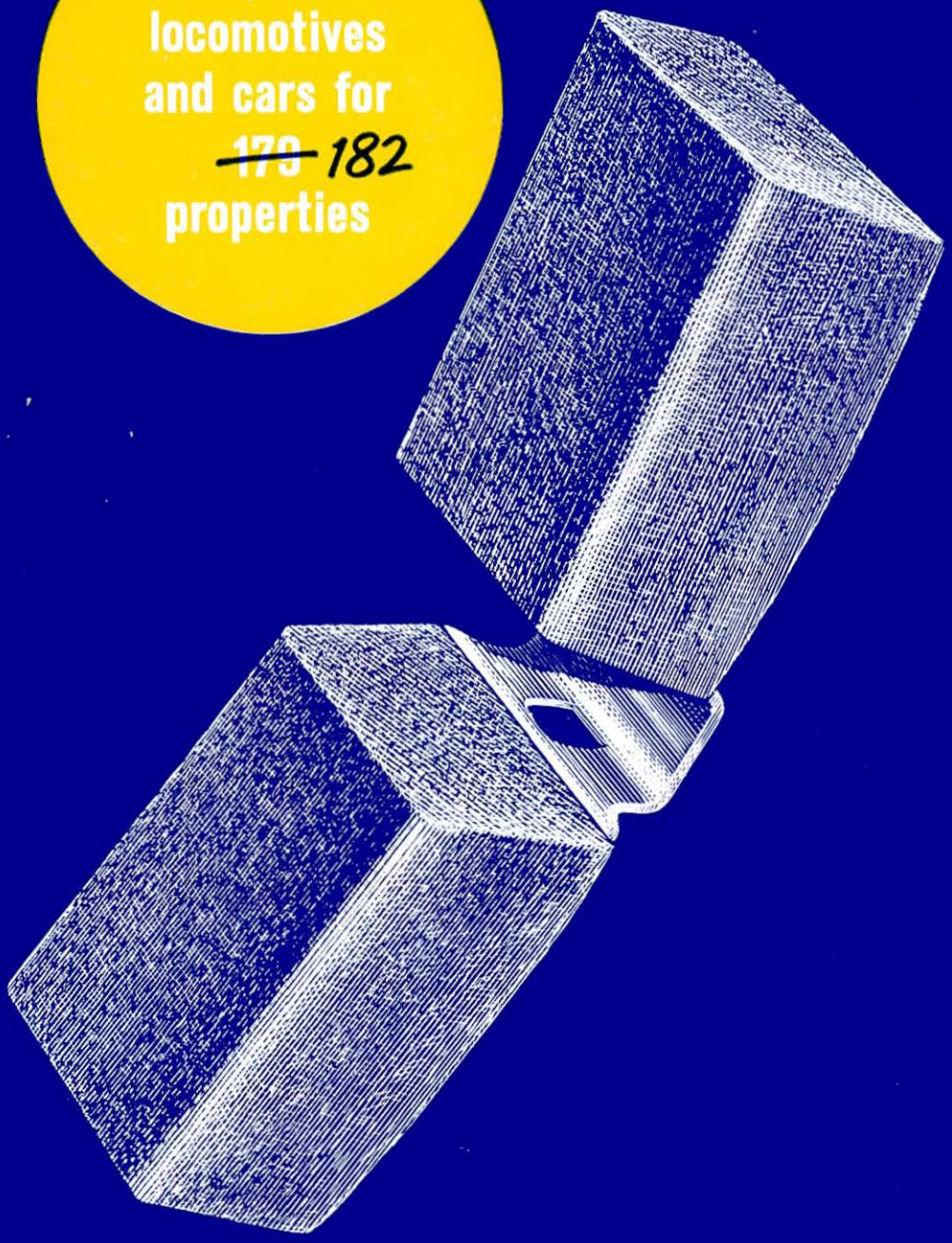


*Revised to September 1, 1962

THE COBRA SHOE... a product of the combined research facilities of—



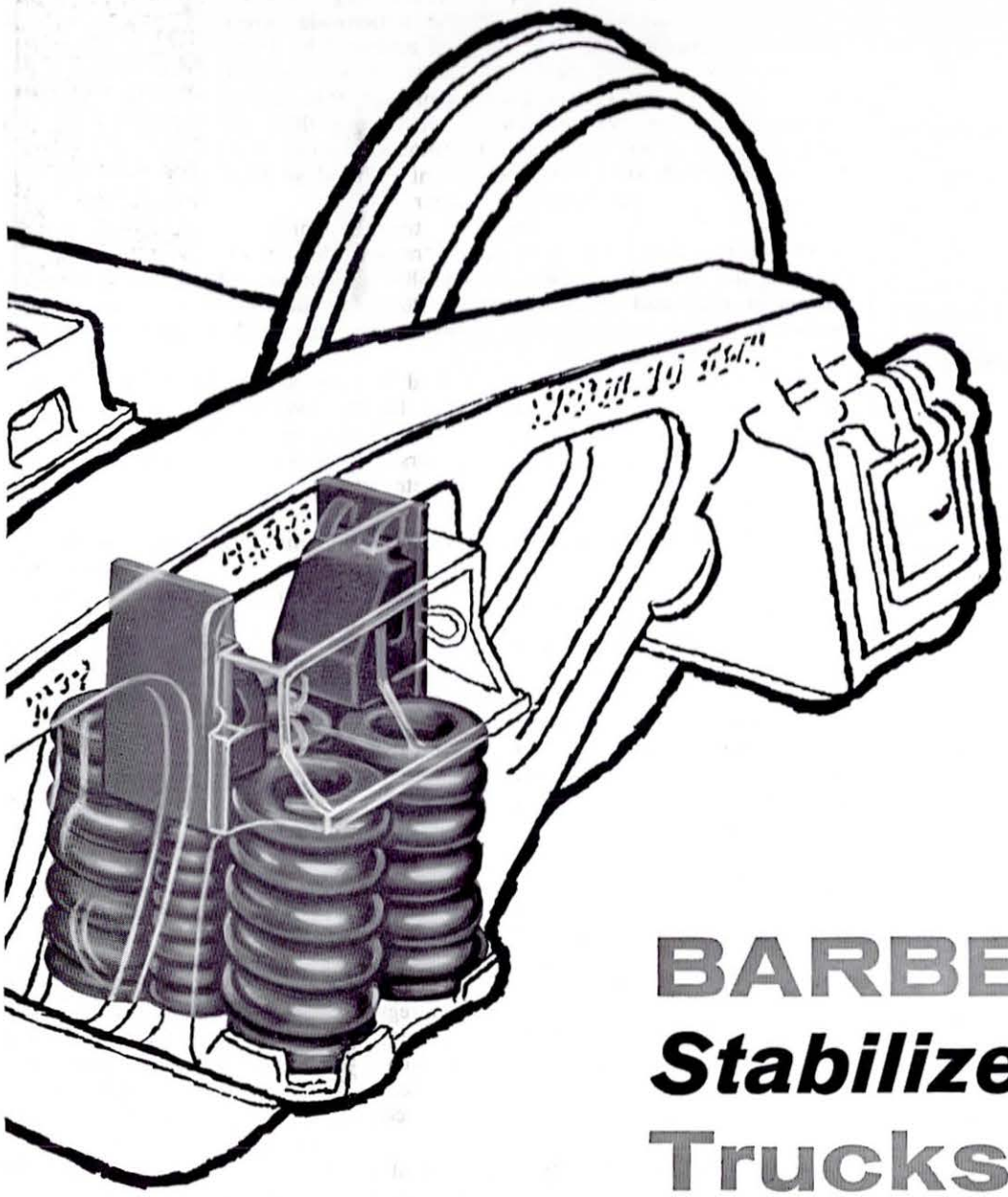
12,529*
~~11,176~~
locomotives
and cars for
~~179~~ 182
properties



RAILROAD FRICTION PRODUCTS CORPORATION, Wilmerding, Pennsylvania

WESTINGHOUSE AIR BRAKE COMPANY Specialists in Braking: **JOHNS-MANVILLE CORPORATION** Specialists in Friction Materials

maximum control—minimum wear



BARBER *Stabilized* Trucks

Full rear bearing area protects the bolster, and longer springs take up what little wear results from years of use. For maximum control and minimum wear, specify Barber.

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332 S. Michigan Ave., Chicago 4, Ill.

BARBER

Manufacturer of
BARBER Stabilized Trucks and center sill CUSHION TUBES

Six Penn Center Plaza, Philadelphia 4, Pennsylvania
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1462

Railroad Future: An Optimistic View

In Vancouver last week, Canadian Pacific Vice President Ian D. Sinclair took a look into the railroad future—and for the most part, he liked what he saw.

In an address on "Transportation Tomorrow," prepared for delivery before the Vancouver Board of Trade Sept. 12, the CPR officer made these predictions:

- "I believe that the railways will find substantial means of offsetting many of the service disadvantages which have caused substantial loss of particular types of traffic in the past. There will . . . be improvements in controlled temperature equipment, and a greater use of piggyback transportation. As time goes by, the substantial cost advantages of the railways will become more manifest in railway pricing.
- "Growth in the extractive industries will be conducive to rail transport of bulk commodities. A possible competitive threat for traffic of this type is pipeline transportation. . . . The technological problems to be overcome, however, are still great and costs, relative to those of rail transport do not appear, at least at present, to offer advantages. . . .
- "I foresee greater use of specialized railway equipment, including integrated trains, and greatly expanded piggyback operations. . . . Containers will be developed on a large scale for use in the integrated transportation of various commodities between various forms of transportation."

Mr. Sinclair was less optimistic for the future of passenger service. "Conventional passenger train services will gradually diminish," he said, "but services by stainless steel equipment, and rail diesel cars, will continue for many years to come. Rail passenger service will continue to attract substantial patronage between high density city pairs, and on such scenic routes as between Calgary and Vancouver. The railway share of the total passenger travel market will, however, continue to shrink, as deficit passenger train services are withdrawn."

Also on the not-so-rosy side, in Mr. Sinclair's view, are "restrictive labor practices" and the "unfortunate public apathy" which perpetuates them.

"Canadian Pacific received only a limited degree of support for its path-breaking stand on removal of the diesel fireman," he recalled. "As a result of public apathy towards this restrictive practice, Canadian railways have been forced to maintain many individuals in jobs for which they are not needed even though gradual removal has been accepted."

RAILROADING AFTER HOURS WITH JIM LYNE

'RAILROADS-1962'—This is the title of a 36-page pamphlet published by the nationwide investment firm of Hayden Stone & Co., and authored by Pierre R. Bretey, one of the country's best known railway financial analysts. I don't know how many copies of this booklet Hayden Stone may have on hand, but I hope there are enough for it to be widely circulated—because it is just about the most thorough survey of the current railroad situation I've seen yet, by an authoritative "outsider."

On the profitability of railroad investments—which, according to the union brethren, is quite attractive—Mr. Bretey discloses that Class I railroads earned $897 million of net income in 1929 and $382 million in 1961; and that the ratio of net railway operating income, before federal income taxes, was 8.5% of gross revenue in 1961, compared with 21.3% in 1929.

Mr. Bretey weighs evidence of "marked improvement in the political climate" for railroads; and concludes that, except for this evidence, he "would question the desirability of either making new or retaining old railroad commitments." Summarizing, Diagnostician Bretey appears to believe that the patient is actually very ill, but with potentialities of complete recovery.

SETTING THE ORACLES TO RIGHTS—One of my friends some months ago recommended to me, as entertainment, a volume of letters by the late H. L. Mencken, the sage of Baltimore—who was an all-out and often amusing critic of everybody and everything. Here's one of his assertions that caught my eye: "I am opposed to every statement of positive truth and to every man who states it. Such men seem to me to be either idiots or scoundrels. To one category or the other belong all theologians, professors, editorial writers, right-thinkers, etc."

I don't know how it is with the theologians and professors, but I know from experience as a scribe that getting too positive in one's printed opinions invariably results in some obliging reader pulling the offender off his perch. Not always an enjoyable experience, but salutary.

DOYLE SPEAKS OUT—Major General John P. Doyle (of "Doyle Report" fame) has an article in Distribution Age magazine for September, in which he carves up the barge carriers' contention that improved waterways should be toll-free. However, he takes away most of the good he achieves by this straightforward analysis of the user-charge issue by turning right around and plumping for more restrictive regulation of railways' competitive rates.

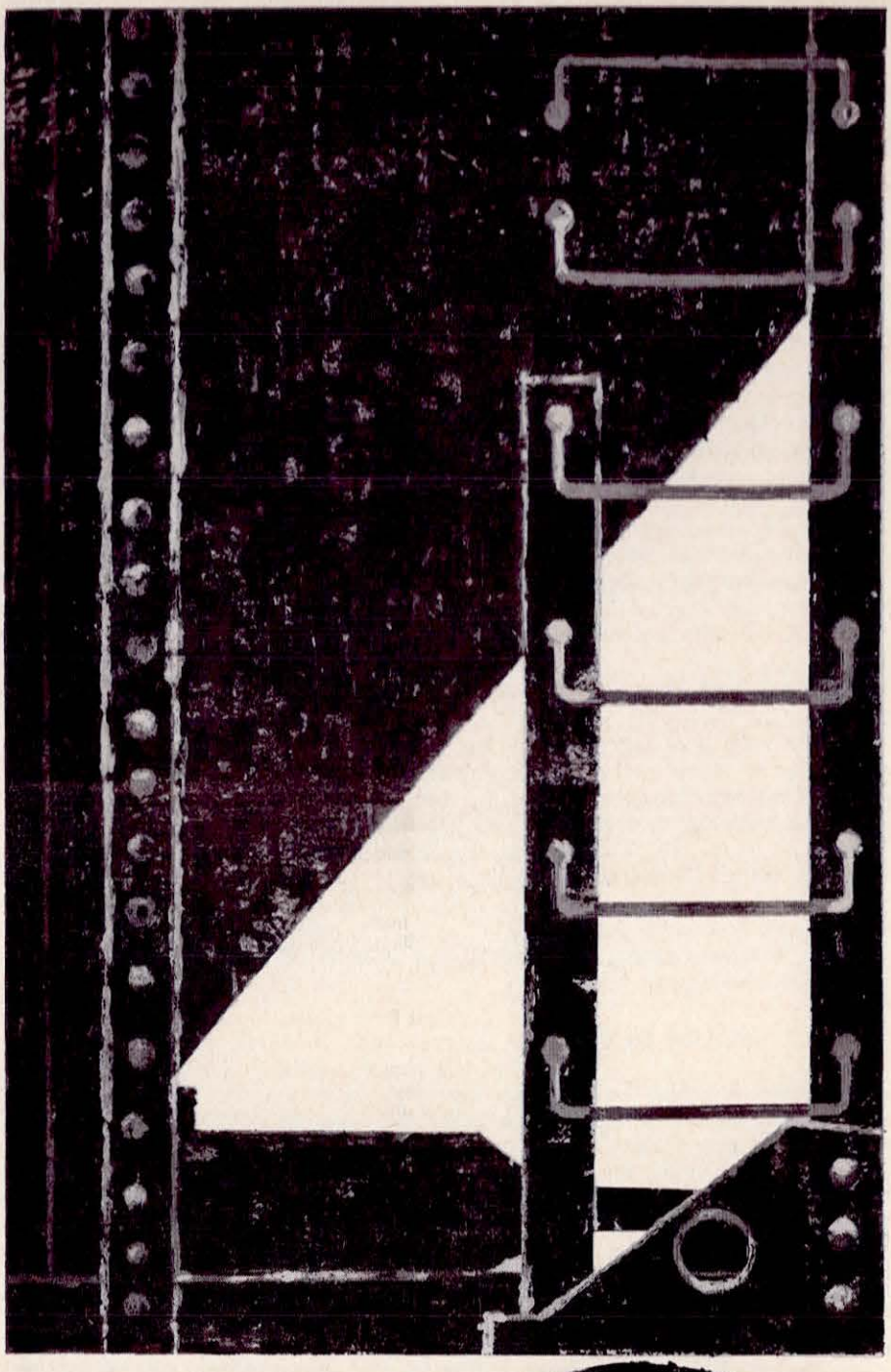
As far as I'm concerned, the complete refutation of all arguments for additional railroad regulation is that railroads are being strangled to death with the degree of regulation they already have. Discipline so severe that it destroys the health of its object can have little to recommend it.

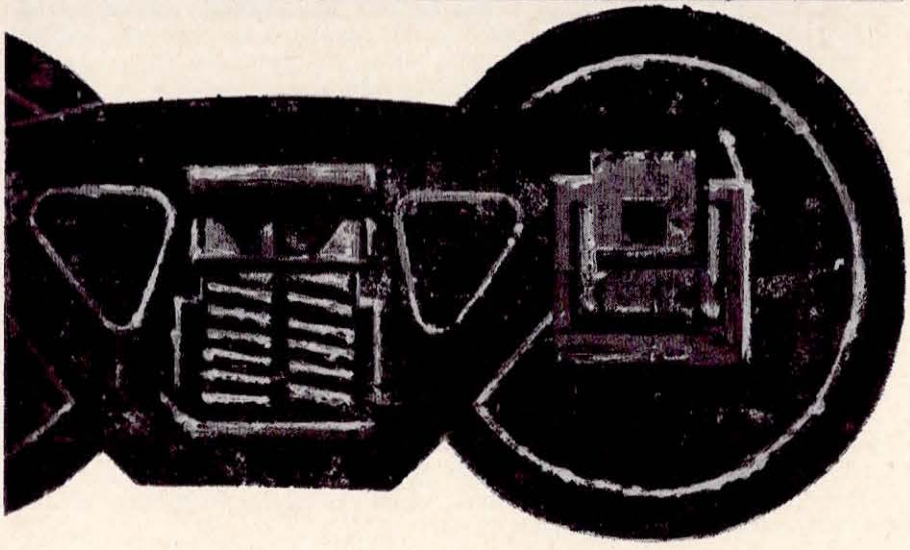
ECONOMISTS ON THE JOB—On several occasions in the past I've noted the dismaying fact that academic economists who, a generation ago, gave a lot of attention to transportation, had diverted most of their critical interest to other matters. This situation is now being corrected.

A case in point is a new book, "Public Enterprise Economics & Transport Problems." It is published by the University of California Press, Berkeley, and the author is Tillo E. Kuhn of the university's faculty. Professor Kuhn gets into the knotty and timely problem of how to compare the economics of two forms of transportation when different degrees of taxpayers' support are involved. He is particularly concerned with passenger transportation, e.g., the comparative economics of a "freeway" versus a rapid transit railway.

PLAN I UP SHARPLY—My favorite motor carrier executive (Bill White, president of Consolidated Freightways and formerly operating vice president of the Lackawanna) has sent me a copy of his company's submission in the ICC's investigation of piggybacking.

Of particular interest to me is Consolidated's use of Plan I—which came to about 64,000 tons in the first half of 1962, and was about 5% of the company's total tonnage. This business is rapidly increasing, being up more than 80% over the first half of 1961. Consolidated would like to piggyback "exempt" commodities, which present regulation forbids.





USS

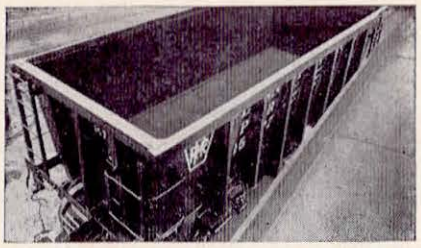
Railroads are re-capturing freight business with new cars designed to do specific jobs at *lower costs*. 85-foot flat cars with racks each haul 12 to 15 automobiles. A new shorter, lighter ore car carries 5½ tons more ore. A washable stainless steel hopper car can handle chemicals, cement, foodstuffs or what have you.

To meet these needs, U. S. Steel has developed a whole family of high strength steels to give designers just what they need to produce stronger, lighter, less expensive cars.

USS COR-TEN brand steel was our first high-strength low-alloy steel—50% stronger than carbon steel with 4 to 6 times the atmospheric corrosion resistance. It was phenomenally successful. More than 340,000 freight cars have been built with COR-TEN Steel since 1934.

We made these claims for USS COR-TEN Steel—

That with stronger, tougher, more corrosion-resistant COR-TEN Steel, freight cars could be made with reduced sections



Traditionally, standard hopper cars have carried such varied ladings as coal, limestone, iron ore, etc. Because of the greater comparative weight of iron ore, the full cubage of standard 70-ton hopper cars is never completely utilized. Consequently, the smaller "jenny" type of ore car, pictured above, has been developed. Through more efficient design this car is 16 ft. shorter and 5½ tons lighter than the standard 70-ton hopper car. Thus, the payload is increased by 5½ tons. USS COR-TEN Steel has provided the "jenny" and also the standard 70-ton hopper, pictured above right, with several economic benefits—longer car life, lower maintenance costs and greater equipment availability.

Steel

This mark tells you a product is made of modern, dependable Steel.

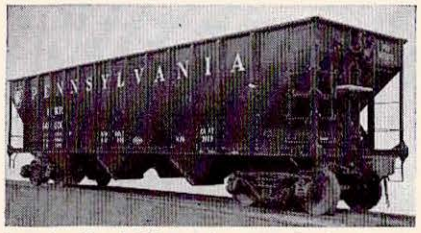
High Strength Steels spark new car designs

to cut dead weight and increase payload without any sacrifice of strength.

That if COR-TEN *Steel were to be used in the same thicknesses as structural carbon steel, the cars would weigh no more but would give increased life before major overhaul.*

Almost 30 years have passed. Most of these cars are still in service and have fully lived up to expectations. COR-TEN Steel used in the same thickness as carbon steel assures a minimum of 50% longer life. And you get the *extra* benefit of longer paint life. Furthermore, COR-TEN Steel is now available with 50,000 minimum yield point, and suitable weldability, in thicknesses all the way up to 1½" inclusive.

USS TRI-TEN High-Strength Low-Alloy Steel has the same high yield point as COR-TEN Steel—50,000 psi minimum. It is one of the toughest high-strength low-alloy steels in the industry, even at low temperatures. In addition, USS TRI-TEN Steel has good weldability. It resists shock loads and abrasion and its atmospheric corrosion resistance equals that of copper steel. These advantages have made USS TRI-TEN Steel widely used for center sills, car frames and other parts.



Standardized 70-ton hopper car built with USS COR-TEN Steel to obtain three benefits: (1) longer car life, (2) lower maintenance costs, and (3) greater equipment availability.

USS MAN-TEN High Strength Steel also provides a 50% higher yield point than structural carbon steel but at a relatively low cost. Its atmospheric corrosion resistance equals that of copper steel. USS MAN-TEN Steel has proved itself in rugged applications such as coal and ore cars. Remember, its cost is low so that a weight reduction of approximately 17% in a structure makes MAN-TEN Steel more economical than carbon steel.

For properties cards on these steels, write United States Steel, 525 William Penn Place, Pittsburgh 30, Pa. USS, COR-TEN, TRI-TEN and MAN-TEN are registered trademarks.

United States Steel Corporation
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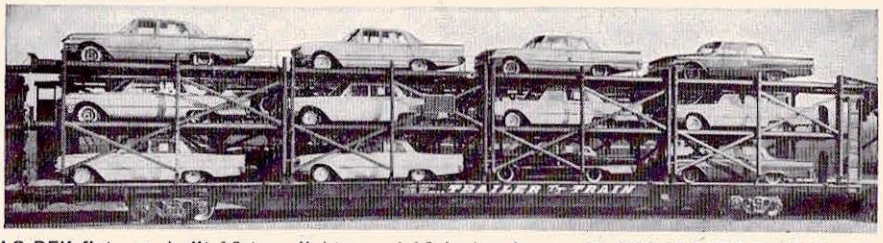


LO-DEK flat car—built 10 tons lighter and 10 inches lower with USS TRI-TEN Steel. Carries 12 to 15 automobiles, two truck trailers or standard containers.

Mechanical Properties

BRAND SIZE	COR-TEN 1½" and under	TRI-TEN ¾" and under	MAN-TEN ½" and under
Yield Point, min., psi	50,000	50,000	50,000
Tensile Strength, min., psi	70,000	70,000	75,000
Elongation in 2", min., %, 0.180" and heavier	22	22	20

USS United States Steel

Shippers find virtually no lading damage when freight

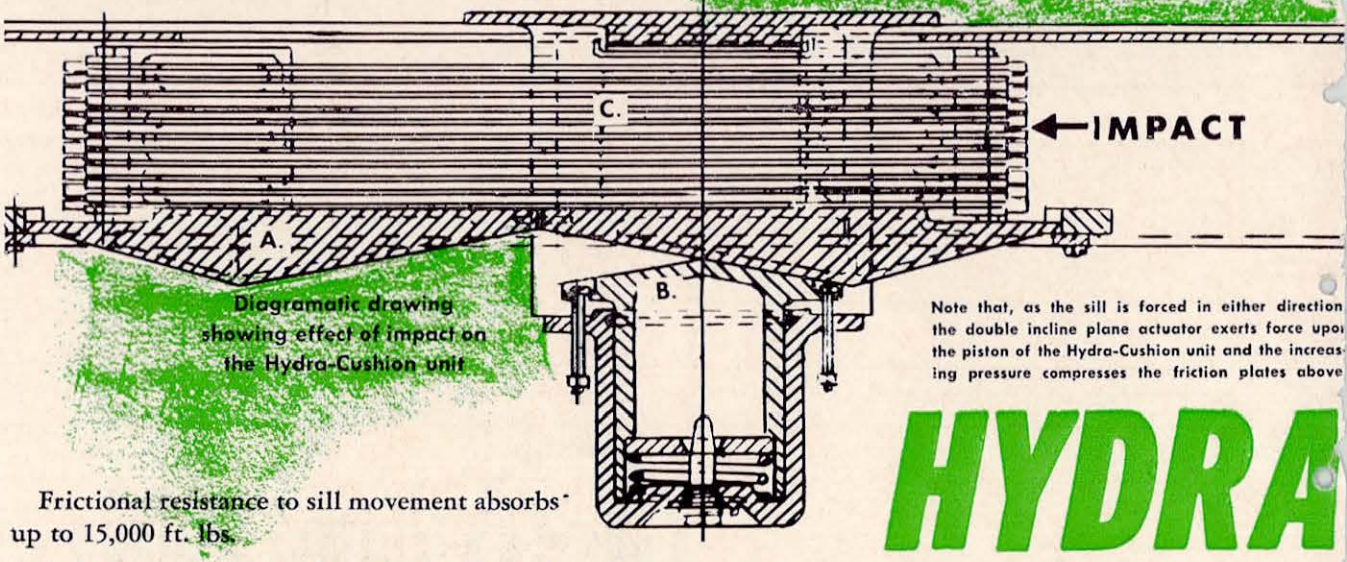
Hydra-Cushion LOW-PRESSURE hydraulic system assures effective car and lading protection against high speed impacts without resort to excessive sill travel.

DUE to the unique design of Hydra-Cushion Underframe, impact forces are so distributed over several cushioning elements that no one is overstressed.

The first shock of impact is cushioned by rubber buff unit developing a capacity of 25,000 ft. lbs. Next, as the 20" travel sliding sill moves under impact, inclined planes (A) on the bottom of the sill activate the hydraulic piston (B) to exert increasing and powerful pressure upon a series of friction plates (C) which afford the final and major resistance to impact.

The efficiency of Hydra-Cushion in providing lading protection is thoroughly documented. Even at impact speeds of 14 m.p.h., impact register readings are only in Zone 2, generally regarded as "normal handling."

It is on the strength of its unparalleled performance that today, five years from the introduction of Hydra-Cushion Underframe, twenty five railroads and private car lines are operating more than 6,000 Hydra-Cushion equipped cars to provide shock-free shipment of fragile freight.



Diagramatic drawing showing effect of impact on the Hydra-Cushion unit

Note that, as the sill is forced in either direction the double incline plane actuator exerts force upon the piston of the Hydra-Cushion unit and the increasing pressure compresses the friction plates above

Frictional resistance to sill movement absorbs up to 15,000 ft. lbs.

As is true, of course, of any hydraulic device, there is no recoil. With the lessening of impact, springs inside the sill return it to neutral position.

HYDRA

For detailed information, write Hydra-Cushion Incorporated 230 Park Avenue, N. Y. 17, N. Y. or 13101 Eckles Rd., Plymouth, Michigan

MORE THAN 6,000 HYDRA-CUSHION CARS NOW IN SERVICE

is shipped by

SHIP by RAIL... HYDRA-CUSHION

SHOCK-FREE IMPACTS at 14 mph

IN 1957, the first Hydra-Cushion equipped freight cars and the first with Hydraulically operated underframes were placed in regular service.

With the car cushioning devices then available, car and lading damage occurred frequently at impact speeds of 5 to 7 m.p.h., whereas with Hydra-Cushion cars (10" sill travel) safe impacts were possible at speeds as high as 10 m.p.h. Now, through improvements, even this performance has been bettered while at the same time car weight has been reduced by more than 5,000 lbs.

Sliding sill travel has been increased to 20 inches. Draft gears, have been replaced by heavy duty rubber buff units. Friction material employed in the friction plates has been improved to provide a more uniform coefficient of friction and extensive testing has paved the way to ideal metering of the hydraulic unit.

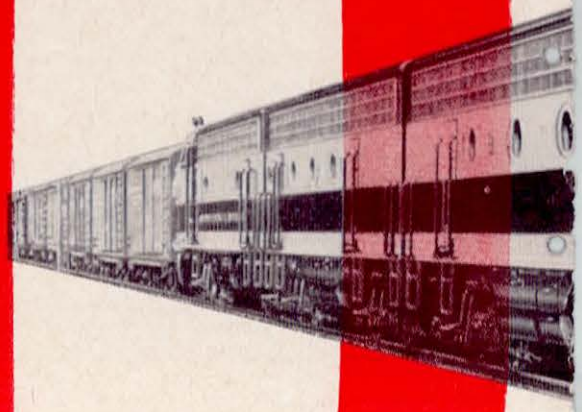
This 20" travel Hydra-Cushion underframe is rated at 14 m.p.h. with an average "G" load of two. Body forces (impact forces transferred to car structure and lading) at this 14 m.p.h. coupling speed, are far below the 500,000 lb. damage zone.

-CUSHION UNDERFRAME

FOR SHOCK-FREE SHIPMENTS

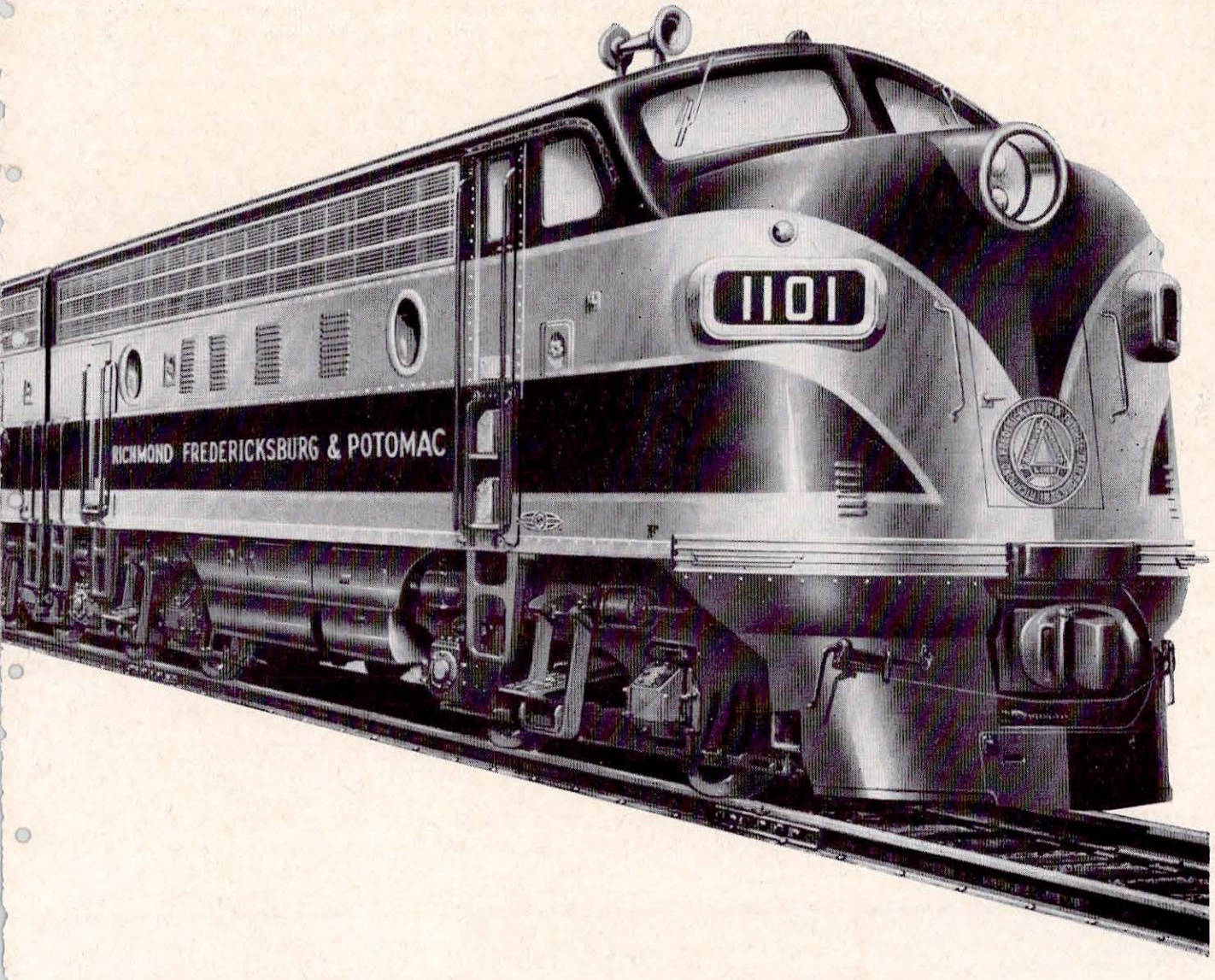
Richmond, Fredericksburg and Potomac Railroad Company reports:

OVER 50 MILLION MILES OF TROUBLE-FREE OPERATION



with

Sinclair GASCON® OIL



The Richmond, Fredericksburg and Potomac Railroad Company has, for more than 127 years, furnished fast, frequent freight and passenger service between Richmond, Virginia, and the Washington, D.C. area. The road has an outstanding record of safety and dependability.

This 113-mile rail line, a vital link between the North and South, has experienced over 50 million Diesel miles of *trouble-free* service with Sinclair Gascon Diesel Lubricating Oil.

Specifically, RFP reports:

- No bearing failures.
- Crankshaft journals remain within manufacturer's recommended tolerances.
- Oil coolers stay clean with minimum maintenance.

This remarkable record of trouble-free service is another reason why *you* should switch to Sinclair Gascon Diesel Lubricating Oil. For additional information, contact Sinclair Refining Company, Railway Sales, 600 Fifth Avenue, New York 20, New York · Chicago · Houston.

Sinclair
RAILROAD LUBRICANTS

Sinclair

Livingston Shop Overhauls NP's

► **The Story at a Glance: About half of the Northern Pacific's 622 diesel locomotive units are serviced and maintained at the road's Livingston, Mont., shop, which is close to the mid-point of the NP system.**

All heavy repairs for Northern Pacific diesel locomotives are made at the road's Livingston, Mont., shop. The facility has been completely rearranged and retooled since the end of NP steam locomotive operation.

Lighter repairs on a major portion of the road's motive-power fleet, as well as the servicing and running maintenance of the road freight and road passenger units powering the NP's trains, are made at Livingston. Almost half of the road's 622 locomotive units are serviced and maintained at Livingston. Located 999 miles west of St. Paul and 893 miles east of Seattle, the shop is close to the mid-point of the NP system. Actually, the road is divided into eastern and western lines for operating purposes; the dividing point is Livingston.

Locomotive maintenance facilities at Livingston are divided into two separate operations: the heavy repair shop and the diesel maintenance shop. The heavy repair shop has 31 stalls in what was formerly the steam locomotive shop. Across one end of this building the NP constructed a five-track, 225-ft diesel maintenance shop with its offices and specialized work areas in the adjacent end of the main shop building.

Total expenditure at Livingston for diesel maintenance facilities has been about $1.5 million, of which approximately $1.1 million was spent on the diesel maintenance shop and on the shop housing the wheel truing machine, both of which went into service in 1957. The balance of $400,000 was spent on tooling and equipping the back shop for diesel engine repairs, converting the boiler shop to an electrical shop, and other changes. Changes are still under way to improve the efficiency of the operations; currently, a new air brake shop is under construction.

Locomotives can receive one of the three types of classified repairs in the heavy repair shop:

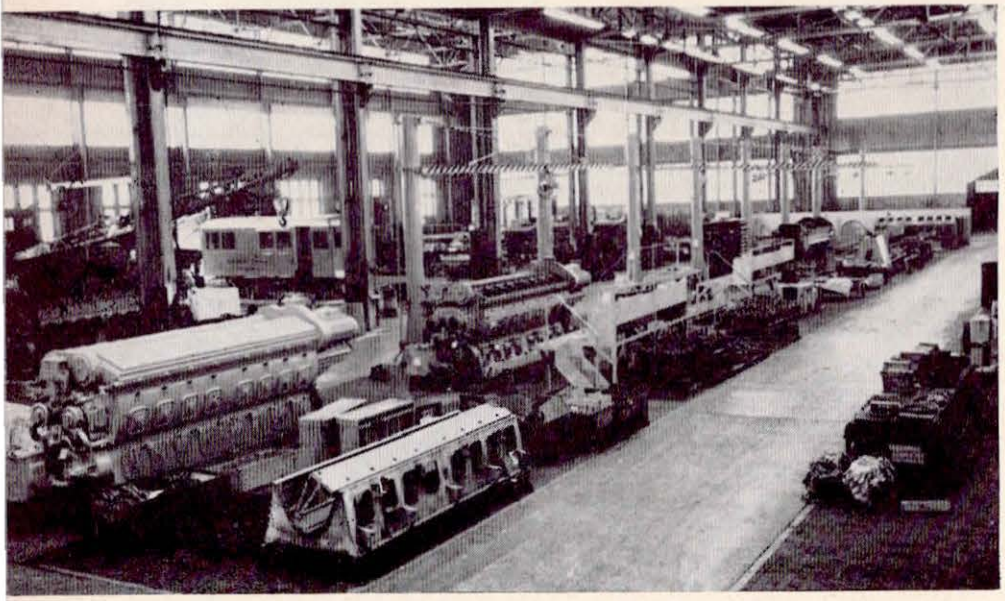
Class A—Heavy repair with engine removed from carbody and completely rebuilt; main generator reconditioned; repairs to carbody. Made at 6-yr intervals for passenger units; 8-yr intervals for freight units, and 10-yr intervals for road switchers.

Class B—Installation of new crankshaft bearings with engine removed from carbody; reconditioning of air compressor and rotating electrical equipment other than main generator and traction motors; reconditioning of traction control equipment; repainting of road freight and road switcher units. Work repeated at 3- and 4-yr intervals for freight and passenger units, respectively.

Class C—Application of new seals and gaskets and installation of reconditioned power assemblies without removing engine from carbody; inspection and repair of various engine, control, and locomotive auxiliaries; repainting of passenger units. Work repeated at 18- and 24-month intervals for passenger and freight units, respectively.

The Class B repair includes, in addition to the items specified, all work done during the Class C repair. For the Class A repair, work called for in the B and C classifications is also performed.

In addition to making the locomotive repairs, the shop reconditions all power assemblies, radiators, engine blowers, governors, fuel injection equipment, traction-motor blowers and electrical equipment, except for rewinding of auxiliary generators and traction motors and rebuilding of main generators. The NP shop at South Tacoma, Wash., handles the heavy electrical repair, including rewinding.



DIESEL ENGINE repair line consists of four stations; engine at left is completed and will next be transferred to the shop's load test station.

Running repairs

The diesel maintenance shop makes running repairs to the NP's fleet of road-freight and road-passenger units which come to Livingston, to 15 road switchers assigned to the Livingston-Northtown (Minneapolis), Minn., freight pool, and 36 road switchers assigned to the Rocky Mountain Division. All freight and passenger trains have locomotives changed at Livingston. Units coming off these trains are serviced at Livingston.

NP passenger units average 15,000 miles per month and freight units, 8,000 to 12,000 miles per month, depending on the type and assignment.

The Rocky Mountain Division has 256 assigned diesel units—190 EMD and six Alco units in freight service; 50 EMD passenger units, and 10 switchers, all of which get ICC inspections at Livingston. A large number of the 226 units assigned to the Rocky Mountain Division for maintenance, operate over much of the NP system.

The NP's only wheel-truing machine is at Livingston, under the jurisdiction of the diesel maintenance shop. It handles wheel work not only for locomotives undergoing repairs in the back shop, but also trues wheels for road switcher units in branch line and local service, and for switcher units assigned to terminals between Billings, Mont., and Missoula. The 44 FT units, which work in the Auburn, Wash.-Livingston freight pool and are assigned to

Diesels

the Tacoma Division for maintenance, have wheels trued during layover at Livingston.

One feature of the Livingston heavy repair shop is the diesel engine repair and assembly line with its component part areas that channel inspected and repaired parts to the line for progressive engine repairs. Diesel engines are removed from locomotive carbodies for Class A and B repairs. Under Class A repairs, the engines are completely dismantled and repaired every eight years for freight units, every six years for passenger units, and every ten years for road switcher units. The engine rebuild line has four assembly positions. At the fifth, the engine is put on load test and receives final adjustments.

Initially, the engine is completely disassembled, all parts cleaned and inspected, and the engine frame moved to the assembly line. In the first position, crankshaft bearings are installed; in the second, the crankshaft and camshafts are applied and the frame placed on the oil pan. In Position 3, the power assemblies, blowers, rocker arms, gear trains, and pumps are installed. In Position 4, the engine is "run in" with an air motor and operation of its fuel and lubrication systems is checked.

Load testing

The engine exterior is then painted and the engine placed on the test stand. There it is operated under loads for over 6 hr to assure its successful operation after re-installation in a locomotive. This is during the course of a two-day cycle of inspection and adjustment on the load-test stand.

Other features in the heavy repair shop include:

- The fuel injection equipment and repair room with the latest in equipment for repairing, testing, and calibrating Alco and EMD fuel-injection equipment;
- A production line, complete with conveyors and equipment, for testing and reconditioning EMD cylinder heads;
- A section for reclamation of EMD pistons;
- An area for reclamation of traction-motor-support bearings;
- An engine-governor repair room.

A complete lube-oil control laboratory is maintained to follow crankcase lube-oil conditions on all diesel units assigned to Livingston. In addition, crankcase lube-oil samples are sent to the Livingston laboratory for all switching and road-switcher units assigned for maintenance points from Mandan, N.D., west to the Coast. Crankcase oil samples from diesel units east of Mandan are checked by the St. Paul laboratory.

NP officers say the laboratories have been beneficial in indicating difficulties with lube-oil filtration, fuel and water dilution, and other factors of engine operation or maintenance which, if not corrected, result in poor diesel-engine operation or failure.

The truck dismantling, overhaul, and assembly area provides for systematic repairs to trucks for diesel locomotives being shopped at Livingston.

The diesel maintenance shop, adjacent to the south end of the heavy diesel repair shop, has five servicing tracks. Tracks 1 to 4 are designated as running maintenance tracks. Six-month repairs, annual repairs and repairs involving replacement of radiators, compressors, oil coolers and assemblies, are done on Track 5, which is provided with an overhead crane. The maintenance shop also performs Class C repairs, as well as running repairs. Main generator or engine change-outs are done in the main shop.

A 50-ton drop table for single pairs of wheels, and a 150-ton drop table for complete trucks, on Tracks 8 and 25, respectively, in the heavy repair shop, are available to the diesel maintenance shop. A separate track equipped with overhead racks is available to each shop to facilitate Class C repairs involving replacement of complete engine sets of power assemblies.

The diesel maintenance shop does complete overhaul of all steam generators for diesel passenger units, including changeouts and installation of replacement steam generators. The shop is on three shifts, seven days a week. It services every day 65 units in winter and 75 in summer, with a force of 179 employees.

A maintenance record, based on trips, is kept for each diesel unit. It lists 96 trips, calling for lead readings, measuring piston-to-cylinder-head clearance, to be taken after trips 24, 48, 72 and 96. In road service, diesel units are given trip maintenance every seven days. All road-switcher units in passenger service, and those in any other service that exceeds 4,300 miles per month, are given trip maintenance every fifteen days. All other road switcher units making less than 4,300 miles per month are given trip maintenance every thirty days. Each locomotive is returned to its assigned maintenance point for quarterly inspection and test.

How Laurel Programs Car Repair

Program rebuilding of Northern Pacific box cars after they have had approximately 20 years of service is a regular assignment of the NP's Laurel, Mont., car shop. The program currently produces three completely reconditioned cars daily with a 60-man force. Approximately 8,000 box cars are involved.

In the course of rebuilding, car side structures are strengthened, improved ride features are incorporated in the trucks, interiors are rebuilt, and the cars are completely painted.

The rebuilding operation is permanently assigned to one of the three repair tracks in the Laurel shop. The other two are assigned for all NP system defect-card work and for miscellaneous car programs. The shop force totals 296, including those on the box-car program. The NP freight-car fleet totals over 34,000 units.

Laurel, 16 miles west of Billings, Mont., is just east of the mid-point on the NP's St. Paul-Seattle main line. The shop is one of three heavy freight-car repair facilities on the 6,500-mile system. Others are at Brainerd, Minn., 139 miles northwest of St. Paul, and at Tacoma, Wash. Brainerd normally assembles most of the new cars which the NP builds in its own shops. Currently, however, Laurel is assembling 25 new 60-ft, 70-ton flat cars to be equipped with cast-steel underframes, slack adjusters, and 6 x 11 roller-bearing trucks. Components, such as handholds, sill steps, truck dead lever guides, and pipe clamps, are being fabricated at the Brainerd shop.

Along with the three-track car shop at Laurel are the supporting facilities, including a wheel and axle shop, a welding shop, a blacksmith shop, an air-brake shop, and a lubricator-pad-reclamation facility. Wheel sets and AB brake equipment are furnished for local use, also for light car-repair facilities at Livingston, Glendive, and Missoula, Mont. Air brake components, including brake cylinder and pistons, are reconditioned for the new car programs required at Brainerd.

The 250-by-66-ft prefabricated building housing the woodworking

(*Continued on page 42*)

On the Burlington . . .

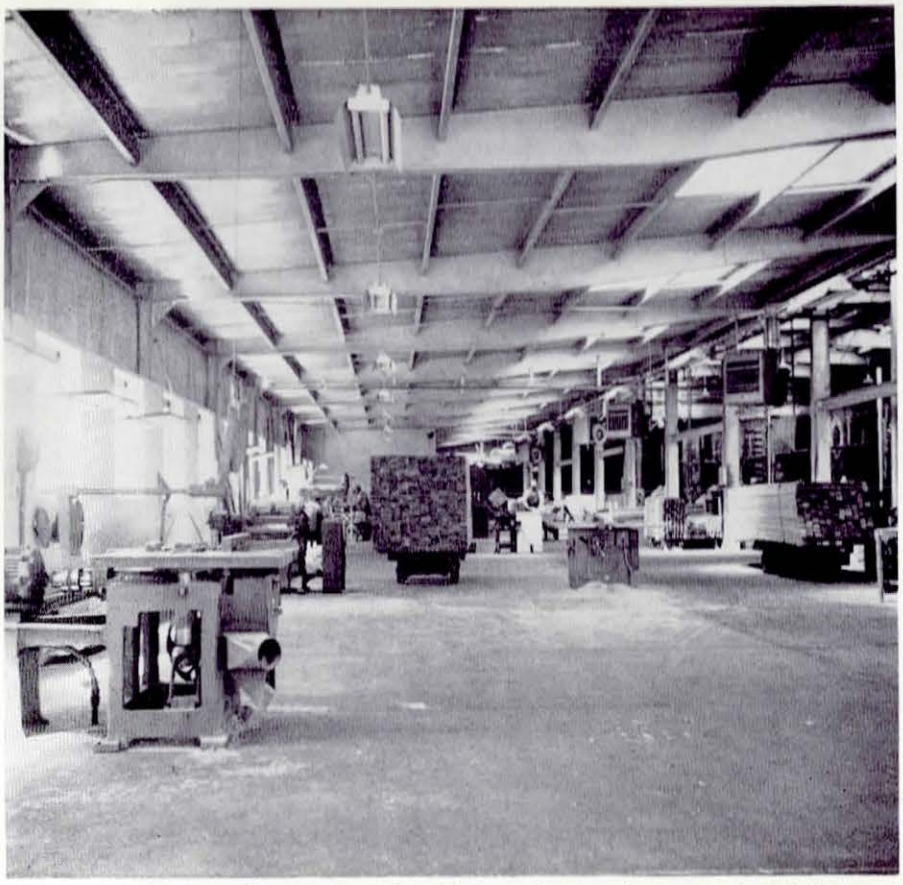
the Revolutionary GP-30

THE BURLINGTON is advancing railroad progress with thirty new General Motors GP-30 Diesel locomotives. The most significant motive power development since Diesel first replaced steam power, the new GP-30 unites thirty major advances, combines high speed/heavy drag performance, offers dramatic economies in operation and maintenance. Through planned locomotive replacement, the Burlington is increasing efficiency by applying the benefits of advanced locomotive technology.

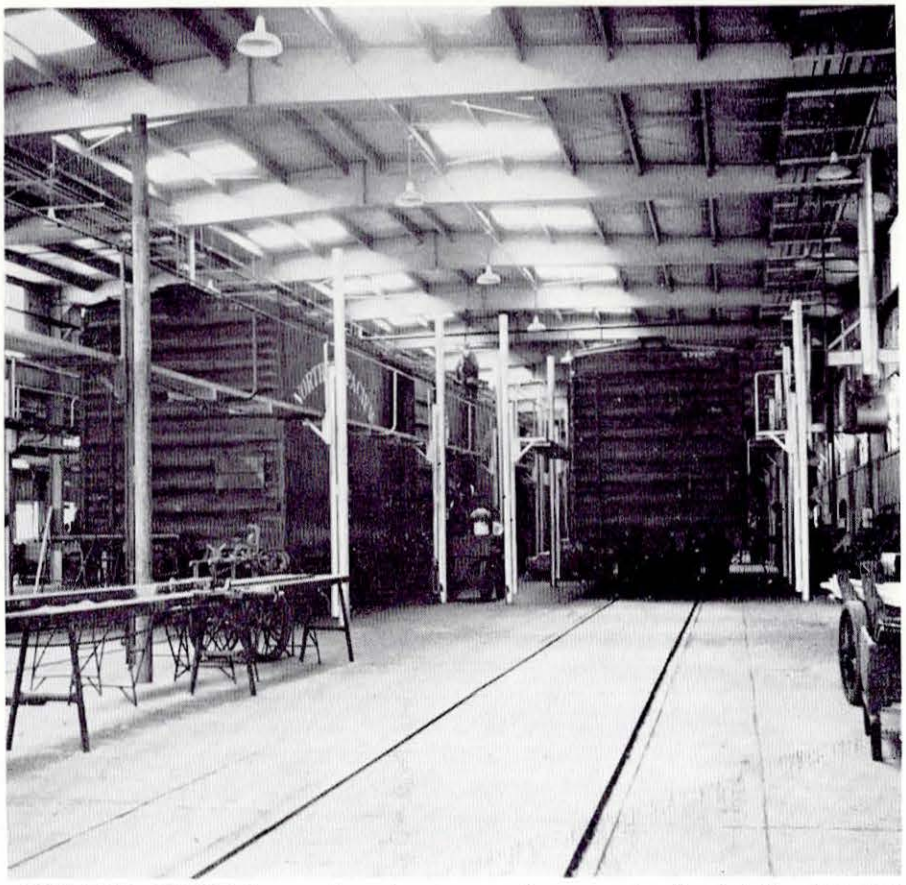
ELECTRO-MOTIVE DIVISION · GENERAL MOTORS · LA GRANGE, ILLINOIS

HOME OF THE DIESEL LOCOMOTIVE · In Canada: General Motors Diesel Limited, London, Ontario

GENERAL MOTORS LOCOMOTIVES



MILL SECTION of shop has woodworking equipment for preparing lining and flooring for cars undergoing repair; area is part of shop built in 1961. At rear is the older section of the building where the steel work is done on cars.



PROGRAM REPAIRS are given to cars moving over track at left; shop has plastic panels in roof to increase the illumination of the working areas.

(Continued from page 39)

shop went into operation in July 1961, replacing the former shop, adjacent to the steel shop, which was destroyed by fire. A 35-ft extension on the south side houses the wood-mill section which produces all the decking and side and end lining.

The new buildings have Inland Ti-Co siding. Sides and roof are insulated with glass-wool mats covered with aluminum foil. Interior walls are lined to a height of 8 ft with plywood. Plastic panel skylights, 8 ft wide, are spaced at regular intervals in the roofs of the main shop and mill section. Under the roof line, on both sides of the woodwork shop, are 6-by-10-ft plastic panels, spaced 10 ft apart. Service lines are color-coded. A new 24-by-66-ft paint shop, east of the wood shop, serves all tracks from the shop.

Tracks 3, 4 and 5, each over 500 ft long, extend through the continuous structure formed by the old and new shop buildings. Defect card work is done on Tracks 3 and 5 on one shift. A nine-station operation within the shop forms part of the progressive repairs line for box cars. The line is set up on Track 4. Tracks 3 and 5 are filled during the night for the next day's operation. Use of Track 3 is flexible, permitting program repairs on flat cars and gondolas to be done, depending on the amount of defect-card work available. Damaged cars are repaired on Track 3. Heavy repairs those requiring over 100 man-hours, are done on Track 5. The working force on Tracks 3 and 5 varies with work load. Tracks in the steel shop hold four cars each; those in the wood shop, five each. Car pullers are available at both ends of the shop for all tracks, and at the paint building and stenciling stations.

In program repairs on Track 4, the NP is removing the short bulb angle sub-side sill, applying a full-length channel section sub-side sill, and completely reconditioning the 20-year-old box cars. This modernization program also involves equipping trucks with 2½-in.-travel springs and ride-stabilizing parts to provide better riding qualities.

Rebuilding is done on a 15-station line, with moves being made at 2-hr 20-min intervals.

In addition to the three heavy repair lines at Laurel, there are five running repair tracks and two wash tracks adjacent to the main shop building. Each running repair track has a capacity of 20 cars where bad-order loads and empties in transit are worked. On the wash tracks about 35 cars per day are prepared for service.

M/W Mechanization: The Payoff Is Big

► **The Story at a Glance: The railroads of the United States and Canada have invested about $1 billion in M/W mechanization. This investment is bringing them an annual return of approximately $350,000,000. Nothing can stop the process of mechanization, but only adequate earnings can make it possible to buy modern machines to replace those that have become obsolete. These figures and this line of reasoning were found in addresses made by management representatives last week before the annual meetings of the Roadmasters' and Bridge & Building Associations.**

The problem of how to obtain the money necessary to continue the process of mechanizing railroad maintenance-of-way forces came in for careful attention last week at Chicago. The occasion was the concurrent annual conventions of the Roadmasters' Association and the American Railway Bridge & Building Association, held at the Conrad Hilton Hotel, Sept. 10-12.

Emphasis was placed first on the progress already made in mechanizing these forces. This was done in an address on "Railroad Management Looks at Roadway Mechanization," by William E. Dillard, president and general manager of the Central of Georgia.

"Practically every railroad in this country and in Canada is using mechanization in its roadway maintenance to some extent," declared Mr. Dillard. "I am told that mechanization cost the railroads in the neighborhood of $1 billion to equip themselves with machines, to train personnel and to continue to improve machines and the methods of using them. This investment, however, is said to be saving the railroads approximately $350 million annually, which is a substantial return on their investment. Moreover, mechanization is enabling many railroads to remain solvent, which otherwise would have been in bankruptcy by this time."

The experience of his own railroad was cited by Mr. Dillard as an example of how mechanization has been carried out. Tie-renewal and track-surfacing on this road, he said, have been built around the following elements:

1) Making each job a production-line operation.

(2) Putting newest-type machines to the line for each step.

(3) Giving work forces and machines as much mobility as possible.

(4) Using radio to tighten up communications within the gang and with the operating railroad.

Mechanization of track work on the Central of Georgia, Mr. Dillard said, was completed in 1957, "by which time we had organized three timber and surfacing gangs to serve the entire Central system of about 1750 miles of main line railroad, replacing 100 old-type section gangs formerly used for ordinary maintenance. Our roadway maintenance program and bridge and building work are now completely mechanized. The preponderance of our roadway maintenance is now done by two large mechanized gangs with modern equipment. Very substantial savings have been the result."

Mr. Dillard indicated he expected mechanization to continue through a process of evolution. This process, he said, "cannot be stopped; nothing or no one can stop the constantly increasing momentum of mechanization. The past has proven this. Ignorance, superstitions, selfishness and apathy may dam it up momentarily, but it cannot be stopped. We must move with it, or be trampled under foot. And we hope that in the centuries to come, when individuals pause to examine events pictured on the scroll of mechanization achievement, they will not see any slackening during our period," Mr. Dillard declared.

'Imagination and ingenuity'

To keep railroads in a healthy solvent condition, "it is necessary that we continue our planning of new, improved methods and machines, and that imagination and ingenuity equal to or surpassing that of the men who brought our railroads into being must be used." He said the aim of railroad supervisors should be to free the industry from "the bonds of increasing costs," not only because it will pay financially, "but because we desire to see our railroads assume their rightful place in the transportation field."

The relationship between railroad earnings and their ability to continue the process of mechanization was brought out in an address by William J. Quinn, president of the Milwaukee Road. He said the low earnings position of the railroads among American businesses underscores the severity of the carriers' difficulties. This situation has not permitted the railroads to allocate enough funds for tools and equipment, he asserted.

He explained that, for the necessary accomplishments of the future, it must be realized that profits provide a real incentive for investors and that earnings must be available for capital expenditures. Only adequate earnings can make it possible to buy modern machines to replace obsolete ones, he said.

"A healthy, growing economy requires a balance of competitive prices, good wages, fair profits, and sound investment opportunity," Mr. Quinn told his audience. "We need money to put our ingenuity and creativity to work. Only a well-fed industry can do a good day's work. An undernourished business cannot shoulder the heavy load of today's challenges."

In this effort the railroads must obtain the help of government and labor, as well as management, declared Mr. Quinn. "We turn to you as railroad men and as citizens to accept the charge that all of us must work for greater public enlightenment and understanding, thus awakening the governmental forces that can clear the way for adequate earnings in our business."

While supervisors are considering this problem, Mr. Quinn also wants them to "give some thought to the task of attracting the right kind of younger man into the railroad industry." He continued: "If we select as our successors forward-moving men—creative men with new ideas for clearing away our old problems—men whose thinking moves naturally and always to the future, then I believe we will gradually master such overpowering problems as automation, international competition, successful operation under regulatory restraint and how to provide for the continued growth of our economy."

The problem posed by international competition was also discussed by another speaker—A. Carl Weber, director of research and engineering, Laclede Steel Company. His subject was "The Source of Our Strength."

This source, implied Mr. Weber, is not only the ability to produce, but also the capacity for consuming what has been produced. Any tendency to interfere with the ability to use or con-

(*Continued on page 48*)

What will your needs be in '63?

Stationary, multi-unit installations of **BUCK** automobile rack car loaders and unloaders are becoming more and more common as traffic increases. However, the various rail-mounted and tire-mounted portable models continue to find favor among many users.

Because of individual user preference and conditions, **Buck** now offers 9 models of this outstanding machine. Without first discussing your automobile rail shipment program, it is difficult to recommend the model that is best for you. We do know, though, how important it is for you to pick the model that will handle your traffic now as well as next year and the year after.

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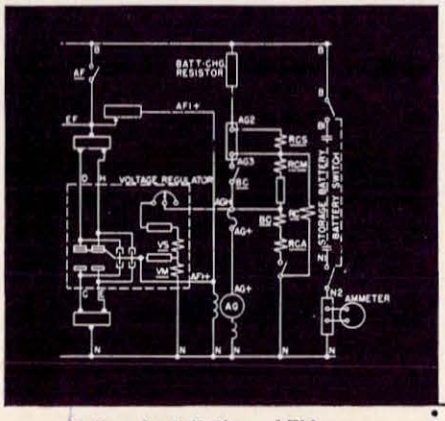
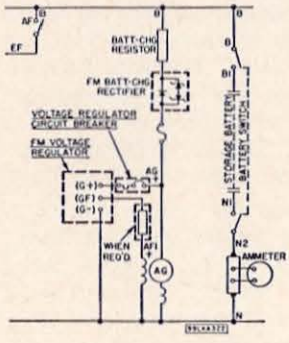


Before installation of FM Regulator-Rectifier Package



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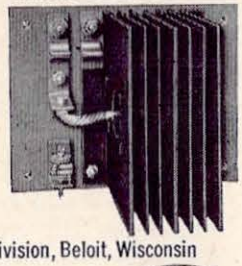

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'Quit Fighting,' Carriers Advised

Anthony F. Arpaia, vice president—international services of REA Express, called on common carriers last week to "quit fighting like wolves over dying prey."

He told the American Society of Traffic and Transportation in Chicago: "Not only is it good business for common carriers to work together for the elimination of unnatural or unnecessary impediments suffered by any of them, but if they do not, how can they adapt to the demands and opportunities that will face them in the future?"

In a growing economy, said Mr. Arpaia, "there is plenty to be had with creative ideas and relative freedom of action. Service innovations, improved transit time and adjustments of rates to harmonize with the principles of an elastic, competitive market can greatly expand both the quantity of transportation sold and its profitability. The greatest threat to the prosperity of transportation is not intercarrier or intermode competition—that should be a source of strength—it is the inability to accommodate to changed conditions. . . ."

He went on to say: "The truism that for-hire carriage exists only to the extent that it provides a cheaper or better service than private carriage takes on a grim new meaning as the network of waterways, highways and airways expands. Great strides are being made in vehicle diversity, economy and performance, together with the cost-cutting methods of materials handling which are developing so rapidly. Shippers are putting them to use for themselves by means of trucks, ships and now airplanes. Their competition with regulated carriers is getting tougher.

"Private carriage offers advantages in flexibility, simplicity of bookkeeping and, where balanced directional movements are available, also favorable cost. This is the field for common action by common carriers. This is the competition to meet.

"Every time an individual common carrier loses reasonable opportunity to compete, not he alone but the entire industry suffers. Reliance on regulation to protect it from this invasion has proved to be a Maginot line."

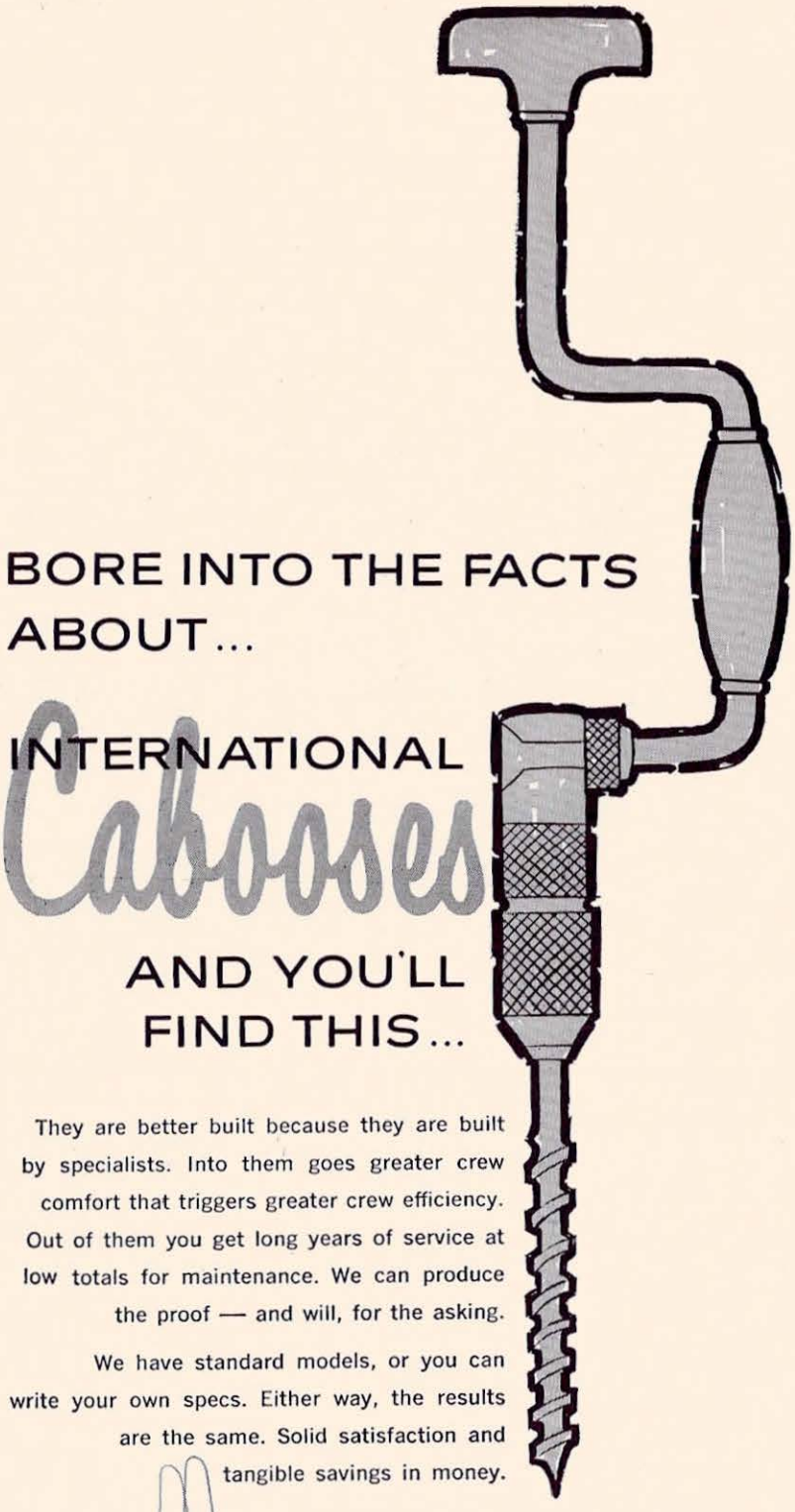
Dividends Declared

PHILADELPHIA & TRENTON.—$2.50, quarterly, payable Oct. 10 to holders of record Oct. 1.

PITTSBURGH, FORT WAYNE & CHICAGO.—7% preferred, $1.75, quarterly, payable Oct. 3 to holders of record Sept. 10.

SOUTHERN PACIFIC.—30¢, quarterly, payable Sept. 17 to holders of record Aug. 27.

UNION PACIFIC.—common, 30¢, quarterly; 4% preferred, 20¢, semiannual, both payable Oct. 1 to holders of record Sept. 10.



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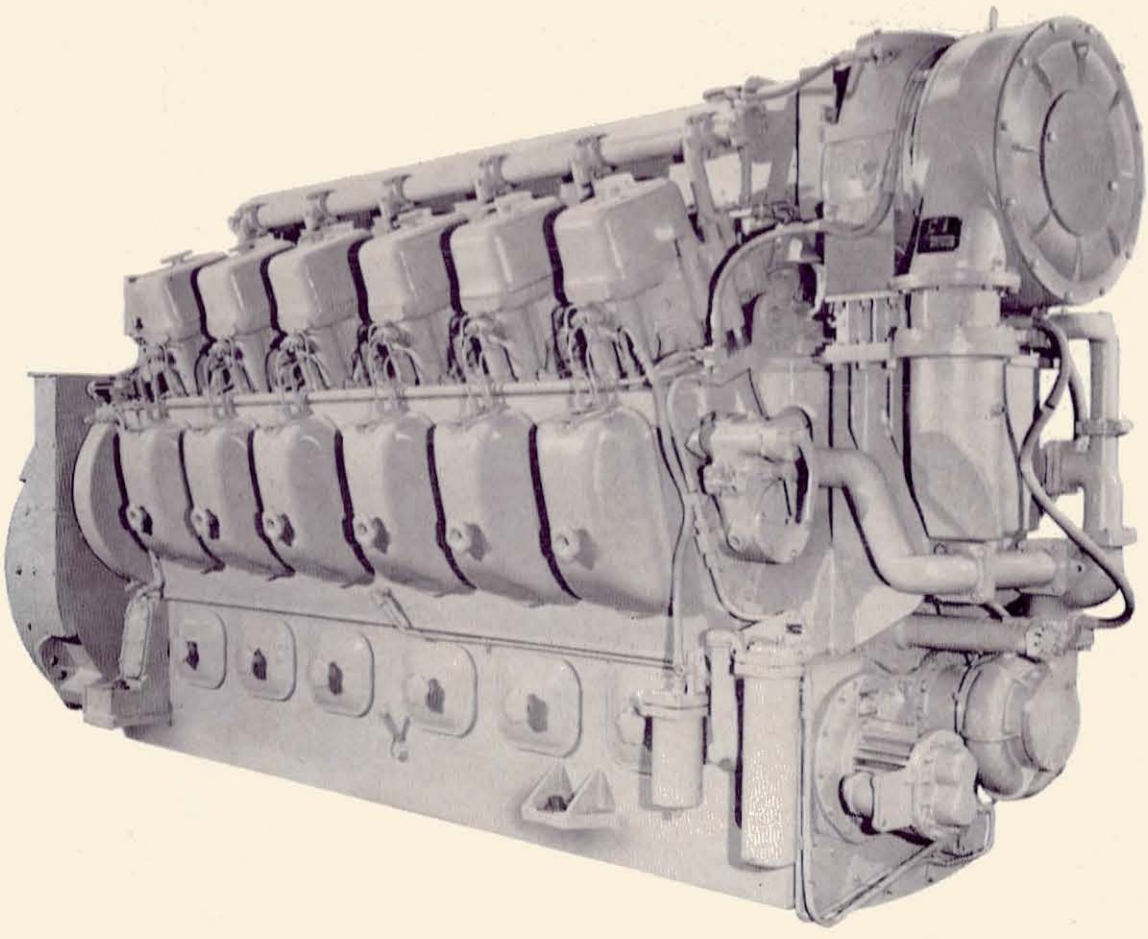
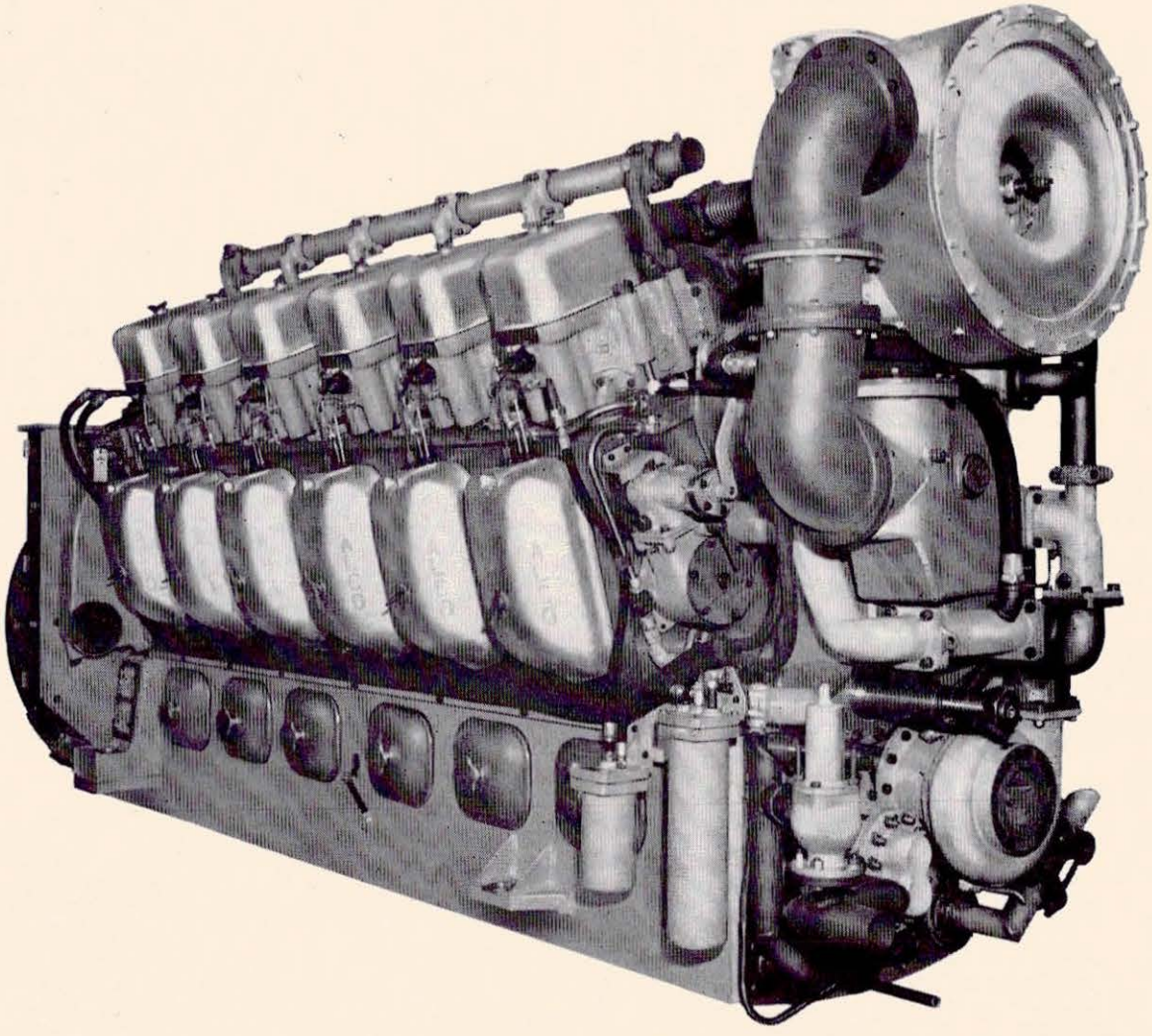


ONLY ONE ENGINE OUTPERFORMS YESTERDAY'S 251.



TODAY'S.

We've made the ALCO 251 diesel even better... more power, less maintenance. Most have been quiet improvements, like a new liner seal. Others, like the increase in horsepower, have made motive-power news. Each improvement has a single goal: to keep the 251 the world's best locomotive engine. (We've listed some of the improvements below. Many can be applied in the field.)

1. 1200 traction hp 251D six-cyl engine **2.** new turbo for 12-cyl engine raising traction hp to 2000* **3.** new 16-cyl firing order* **4.** new main bearing stud stretch and washer, elimination of nut cotter pin* **5.** new cap and saddle serration **6.** new gear train **7.** new camshaft dampers on 16-cyl engine* **8.** new lower-liner seat inserts* **9.** new lower-liner interference fit* **10.** new Viton seal for lower-liner fit* **11.** new air elbow-to-head gasket* **12.** new Ni-Resist turbo inlet casing* **13.** new exhaust manifold for 12-cyl engine* **14.** improved water venting for 500 and 700 series turbos* **15.** new fuel inlet stud and nut arrangement* **16.** new lube-oil pump drive shaft **17.** new tachometer-generator drive* **18.** new grommet at top of fuel pump cover* **19.** new fuel return piping* **20.** new air elbow-to-block gasket* **21.** new barring gear* **22.** new wide rollers for fuel cam

*Indicates change may be applied in the field.

ALCO **PRODUCT QUALITY COMES FIRST**

sume affects everyone of us, declared Mr. Weber. Such tendencies amount to "a chewing away of the standard of living." The quickest way to break down a country, he said, is "to squander its resources and ruin the purchasing power of its money."

The loss of purchasing power in the United States, he implied, is related to the expansion of industry in other countries, particularly the steel industry. The capacities of other countries to produce steel have multiplied many times, he said, but their ability to consume steel has gone up only about 25 per cent. He then presented figures to show that foreign steel producers, in competing for the market in this country, have a cost advantage over domestic producers of $38 per ton "right off the bat."

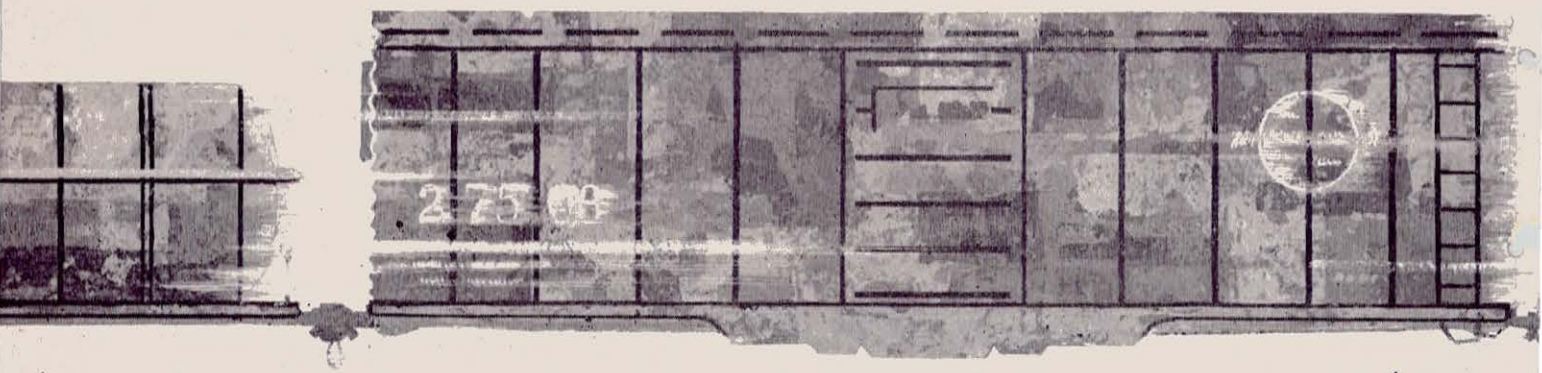
Whereas there are 79 steel mills in the United States, there are 241 such mills in Japan, Mr. Weber said. He explained that every job created in Japan means the loss of a job in this country. This, in turn, means a loss of purchasing power, which, he reminded his audience, is the "source of our strength."

The quality of its supervision is one of the keys to the success of any organization, declared another speaker. E. H. Hallmann, director of personnel, Illinois Central, spoke on the subject, "How to Be a Better Supervisor Under Today's Conditions." Mr. Hallmann made it clear he was not talking about top supervision alone. "In fact, it is perfectly possible for top supervision to be fairly mediocre on occasion, as long as the middle and first-line supervision is consistently good . . . It is this kind of supervision that is the backbone of a company's personnel structure."

Mr. Hallmann offered a "simple method of thinking about supervision: The good supervisor looks upstairs, he looks downstairs and he looks out over the same floor, or the same level."

"The good supervisor looks upstairs," said Mr. Hallmann, "to be informed about things for which he is responsible. He needs to be informed about company policy so that he can interpret that policy in the right spirit as well as to the letter. As all of you can appreciate, the interpretation of a policy is as important as the policy itself."

"The good supervisor," declared Mr. Hallmann, "naturally keeps a weather eye open on what is happening downstairs. He keeps his people informed as to what is going on in the business in which he and they are making their living. In our company, we have various methods of doing this—a monthly



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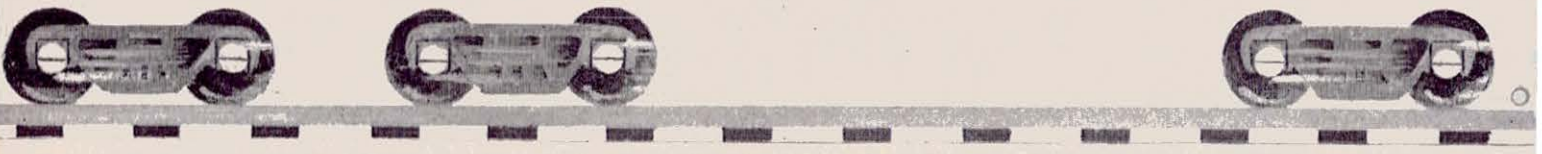

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message to our supervisors, our company magazine, our personnel bulletins and other similar methods with which you are familiar in your own companies. But nothing beats the old word-of-mouth method of well-informed supervisors taking the time to explain policies and events to those folks who work in the ranks. This method has the human touch, and all of us know the human touch is a precious ingredient that can easily be lost in a big corporation.

"It is no simple task for a busy supervisor concerned with getting the job done to take the time to explain the why and wherefore of company policy. There is a tendency among some supervisors to stand aloof from the company policy, as though they had nothing to do with it. If disciplinary action is involved, they shift the blame over to company policy and the 'brass hats' upstairs."

Mr. Hallmann then gave various rules to be followed by those who wish to become good supervisors. One of these "is to get all the facts before you discipline an employee." Another second rule of supervision, he said, is that the wise boss does not discipline a man in the presence of others. "Finally, the good supervisor seeks to build himself up with his employees. He seeks to make them trust and respect him. He always tries to remember to be fair to even those he may dislike. Although an employee occasionally will try to take advantage of his fairness and decency, he nevertheless keeps reminding himself that this policy of fairness wins in the long run."

"The wise supervisor," continued Mr. Hallmann, "also looks around on the same level and watches his step with his fellow supervisors. The statement often has been made that more men win promotions through the cooperation of the men they work with then through the action of their boss, and I will certainly agree with this statement."

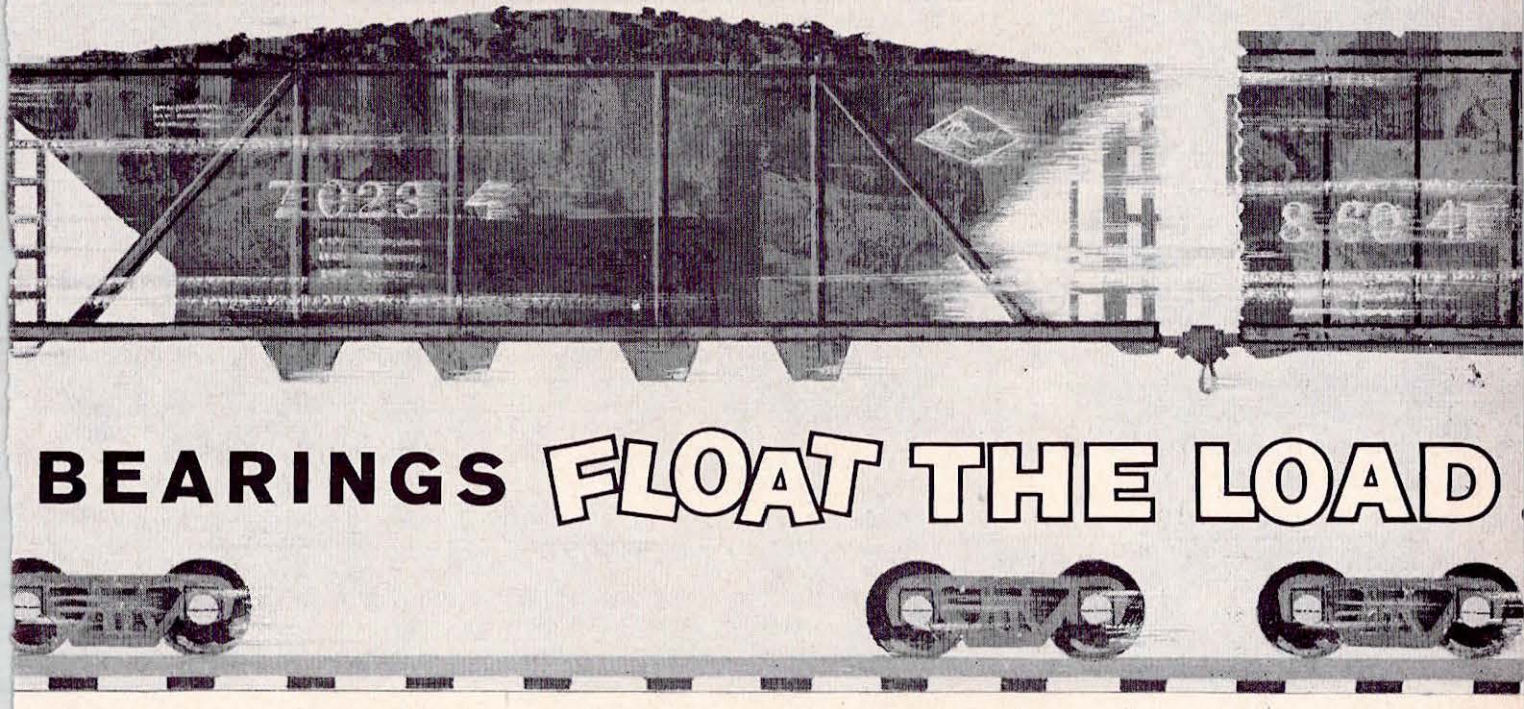
After citing these rules, Mr. Hallmann suggested that they be applied only in combination with experience. If there is a formula to be followed, he said, it should be a general one, of the kind recommended by Professor F. J. Roethlisberger. The basis of this formula is that industry and business must have in their supervisory ranks more educated people. His definition of an educated person is one with these four qualifications:

(1) He knows what he does not know.

(2) He has an honest curiosity about his personal experience.

(3) He has a stop-look-and-listen attitude towards his own experience and is capable of re-evaluating it and learning from it.

(4) He has some skill in being able to receive communications from other persons.



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JFK Pro-Merger Stand Feared by Rail Unions

Railroad labor expressed last week its fears that the Kennedy Administration, anxious to prove that it isn't really "anti-business," may issue a report backing railroad mergers.

Chairman George E. Leighty of the Railway Labor Executives' Association told Commerce Secretary Luther Hodges that the unions have read "with tremendous shock and disappointment" press reports that a federal inter-agency group on transport mergers (appointed by Mr. Hodges at President Kennedy's request) was preparing to release a report taking a "pro-merger" position.

"This report is especially shocking," asserted Mr. Leighty, "because in his message on transportation of April 4, in which he asked you to appoint this federal inter-agency group, the President directed the group 'after proper consultation with interested parties,' to formulate general policies on mergers in each segment in the transportation industry." He added:

"We have made every effort to seek the opportunity to present the views of railroad labor in accordance with the expressed intention of the President that the inter-agency group consult with interested parties. Our endeavors would appear to have been fruitless if the newspaper article is correct."

Mr. Leighty said it was "particularly disturbing" to hear that "the high-level committee reached their pro-merger position in order to support their contentions that the Administration isn't anti-business . . . "

Mr. Leighty made his complaint in the form of a letter to the Commerce Secretary. Copies went to the attorney general, the secretary of labor, the chairman of the Council of Economic Advisors, and all members of the inter-agency group.

Kefauver Aide Poses Merger Questions

A Senate antitrust lawyer who thinks that railroad management has given the public a one-sided view of the merger situation undertook last week to balance the picture.

In raising questions about the advisability of pending merger proposals, E. Winslow Turner, assistant counsel for the U.S. Senate Antitrust and Monopoly Subcommittee, emphasized that he spoke only for himself. The subcommittee's chairman, Senator Estes Kefauver (D.-Tenn.), is the sponsor of a labor-backed bill that would block government approval of big railroad mergers until Dec. 31, 1963.

Mr. Turner told the Transportation Law Committee of the Federal Bar Association, meeting in Washington, that the railroads are "amazingly confident" that they will win ICC approval of pending merger applications. He conceded that management's "public relations efforts to 'sell' railroad mergers to the American people have been most successful and improve with each day."

But, he added:

"There are those both in Congress and among the public who question these vast trunkline combinations with their elimination of rail competition and their consequent increase in economic and political power. They are concerned about the admitted intentions of merger applicants to rip up substantial trackage, to abandon thousands of miles of lines, to reduce freight schedules, to eliminate terminals and other facilities, to lay off workers and to reshape service patterns. . . . They remember from the past the excesses and abuses which can result from the creation of extensive economic and political power in the hands of a railroad and in the financial interests which control and influence the policy of such a carrier. And they see with the advent of piggybacking the tremendous leverage which these proposed rail giants may have in dealing with other modes of transportation with respect to rates, service, and the solicitation of customers, and a movement toward diversified transportation companies."

He called it "unfortunate" that merger opponents "have not been more vocal in meeting the pro-merger 'information' campaigns of the railroad industry and in presenting the other side of the coin to the public."

He said railroad labor's "funds and manpower are hardly sufficient to contain the public relations activities and legal strategies of the rail industry."

Then he raised a number of questions which he said need further investigation and analysis.

Economies of Scale.—"Experts before the Subcommittee on Antitrust and Monopoly have testified that although some of the nation's trunklines were not in as good finanical shape as they should be, consolidations might compound greater problems for them than if they remained at their present size [and might] only lead to greater inefficiencies and perhaps undue excesses of power over transportation policy."

Imbalances of Economic Power.—"In all this . . . analysis of the pros and cons of railroad mergers, one is apt to forget a significant point, and that is that once these big amalgamations are put together, there will be no turning back, no chance to try the game over again. These are social and economic decisions which deserve the highest of responsibility and the sharpest analysis. One of the greatest dangers to this proposed railroad industry reorganization is the possible imbalance of economic power."

Inability of the ICC to Handle the Merger Problem.—"The Staff Study published by [the ICC's] Bureau of Transport Economics and Statistics has analyzed past applications of public interest criteria and has indicated that substantial modifications or additions to the methods of testing major merger cases are necessary before the Commission can best determine effectively which rail mergers are in the public interest. . . ."

Failure of the Case-by-Case Approach.—"Present legislation gives the Interstate Commerce Commission only the bare power to approve or reject mergers as they are proposed and on the basis of the records developed. There are no powers given the Commission to include in the proposed systems affected roads which have not petitioned for inclusion. There are no powers to compel mergers to be carried out after approvals are made . . . . If the Commission does not believe it has any powers of investigation or planning, then it should go to Congress and admit its needs."

This news story* speaks for itself as testimony to the benefits that railroads and shippers get from aluminum rolling stock . . .

Aluminum Hopper Car Tried Out With Dry Cargo

BUFFALO—An aluminum hopper car with bulging sides, designed for vacuum-type unloading, has been demonstrated on Erie-Lackawanna team tracks here.

Built as a prototype by Greenville Steel Car Co., Greenville, Pa., the car brought about 110,000 pounds of corn grits—a processed form of corn used in making beer—from Krause Milling Co., Milwaukee to International Breweries Inc.'s Iroquois Division here.

Iroquois' new "airveyor" unloading facility recently built at trackside at a cost of about $15,000 to unload more conventional covered hoppers, was used with the new car.

The car can carry up to 150,000 pounds of corn grits, compared with a maximum of about 130,000 for hoppers now in service.

Its teardrop shape when viewed from either end, its single center drop in contrast to the conventional two, and more sanitary fittings are among the manufacturers' claims for superior performance.

The brewery's unloading equipment involves use of a vacuum system which draws grain products from the rail car to a cylinder, 7 feet high, 3 feet in diameter, and then to a company truck for delivery to the brewery.

It also gives us an opportunity to remind you that this car, built by Greenville Steel Car Company, is an ALCAN Tank Hopper Car—built to rigid ALCAN specifications.

ALCAN has, since 1945, been the leader in developing challenging new concepts for aluminum in rolling stock. Before any ALCAN-design car is marketed commercially, it undergoes scrupulous engineering design analysis followed by repeated rigorous impact, fatigue and static tests, and strenuous and lengthy runs with full loads under actual operating conditions. As a result of the care and caution that go into every ALCAN-design car, after thousands of miles of operations on trackage of leading North American railroads, ALCAN-design cars have maintained a spotless record for sturdy performance.

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Ernest S. Sciutto
Manager-Railway Applications

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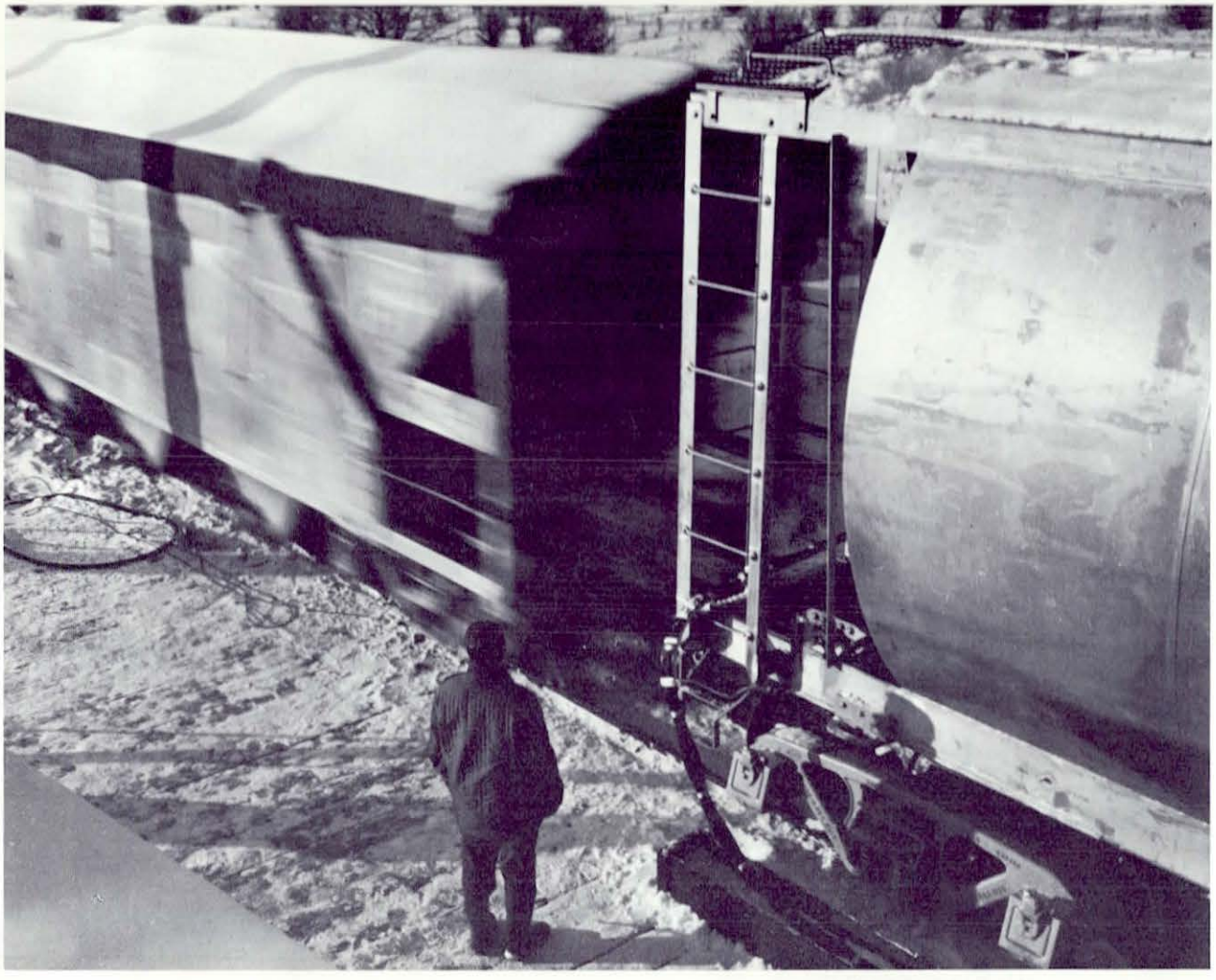
* Reprinted from "American Metal Market," August 14, 1962



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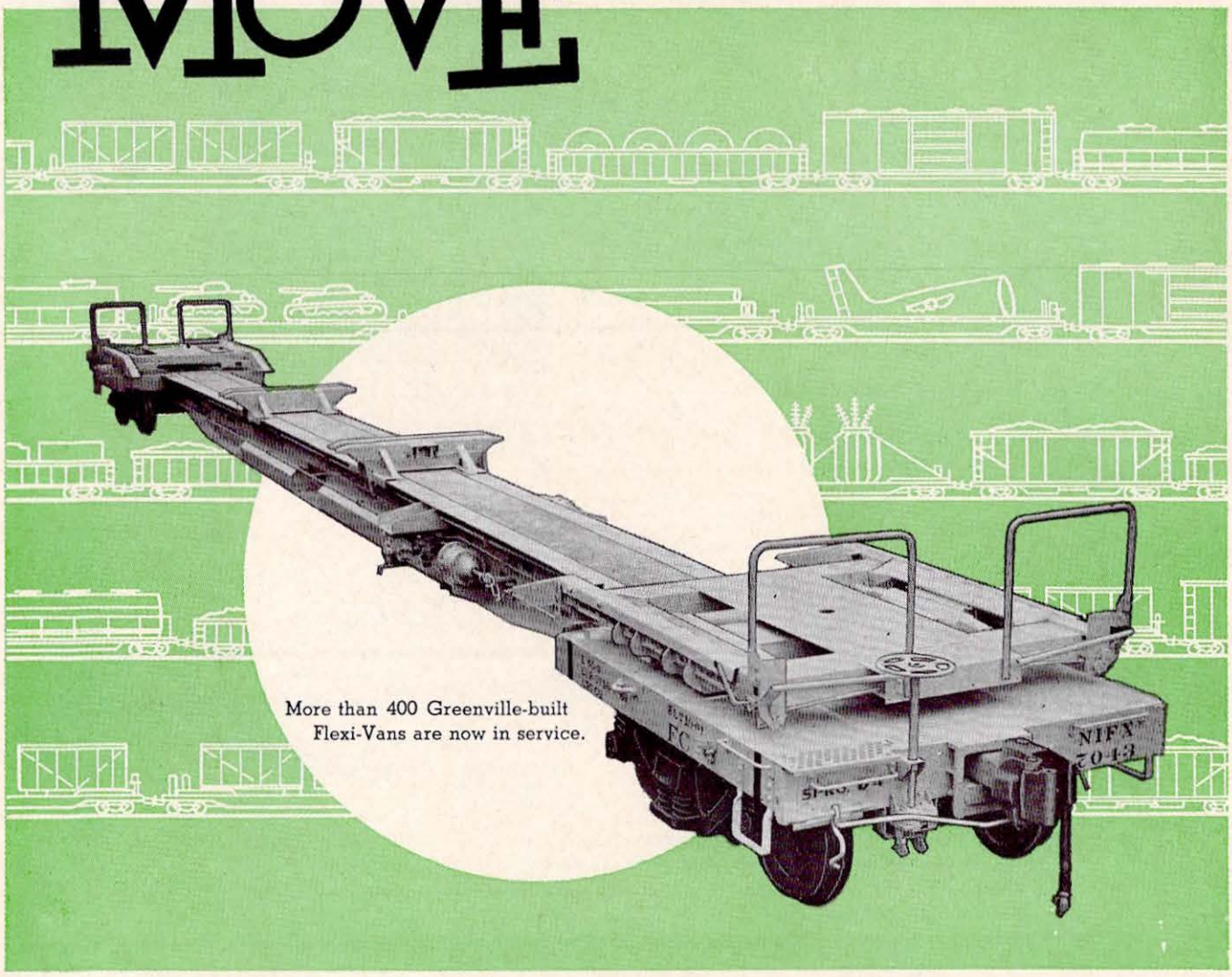

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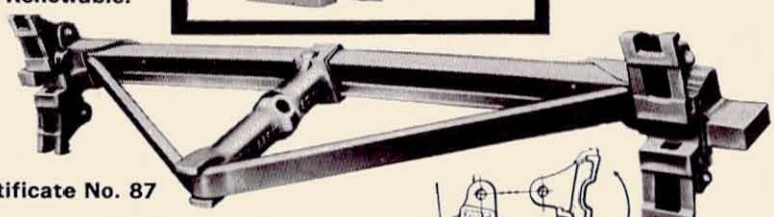

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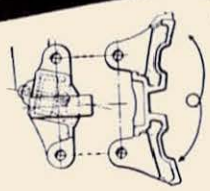

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LETTERS FROM READERS

Class Rates

Morristown, N.J.

To the Editor:

I read with interest the article in the Aug. 27 issue of Railway Age entitled, "Why the Class-Rate System Is Anti-Economic for RR Freight."

The idea that rail rates should be related to truck operating costs is only slightly different from a relationship to truck rates, since truck rates are obviously based upon the operating costs.

You are, therefore, saying that rail rates should continue to be related to truck rates, and this generally conforms to the thoughts shared by the Congress and the Interstate Commerce Commission during the past few years.

Recently, however, we have witnessed a change in this thinking, a change advanced by President Kennedy in his recent transportation address which suggested that perhaps this relationship is no longer wise. Rate regulation in the United States is governed largely by legislation which dates back many years. True, the Transportation Act of 1958 offered some relief, but not enough to offer the relief which railroads need.

I agree that the class-rate system is anti-economical for the rails, and I think your proposal of economically constructed rate scales has merit. I do feel, however, that each mode of transportation should base its rates more on its own costs and a little less on the relationship of rates between modes. The threat of a monopoly is not as apparent today as it was 75 years ago, and therefore greater emphasis should be and can be placed on the economics of supply and demand.

The present method of rate making places many shippers and carriers at a disadvantage. The shippers suffer because some are unable to obtain adjustments from the railroads because of competitive rate levels. The carrier suffers (and here I think both rail and motor carriers are included) because they are forced to maintain a level of rates designed to protect all carriers within a particular mode. By this I mean that all rail carriers are not managed in the manner—some are more efficient than others. However, since many times they are prevented from exploiting this greater efficiency, they are in effect keeping the inefficient carriers in business. The shipping public suffers and the carriers suffer because they cannot always attract the tonnage handled by the inefficient carriers.

Why is it necessary that the transportation system of the United States consist of over 500 railroads and of hundreds and hundreds of motor carriers? I cannot believe this is needed to avoid a monopolistic condition.

A healthy transportation system is necessary to the economic growth of the nation, and I cannot see how we expect to have a healthy system when rate-making procedures are designed to hold up the weak and infected members of the total system.

Your article was thought-provoking, and I strongly encourage more articles of this nature.

A.S. Daviau
Traffic Manager, Mennen Co.

[We do not advocate relating railroad rates to truck rates, but we do believe the rate-makers must take into account truck operating costs since it is seldom profitable to ignore the potentialities open to a competitor. We certainly do not favor the "share-the-traffic" attitude of some regulators, and do subscribe to the rate-making freedom that President Kennedy has recommended. We only wish he had gone farther and asked for an end to all regulation of minimum rates—Editor]

Columbus, Ohio

To the Editor:

I wish to refer to the article in the Aug. 27 Railway Age entitled "Why the Class-Rate System Is Anti-Economic for RR Freight." We are all becoming more aware of the necessity for major changes in the present rate structure. More articles of this type will lead to a better understanding of the industry's problems and a more cogent basis for rate making. Your magazine has helped greatly to further this cause.

The basic premises of this article are indeed sound. I personally do not feel that the "Tentative Optimum RR Rate" is sufficiently below the truck cost, all as shown in Chart I of the article, to allow the railroad to recapture most shipments. However, this is a matter of opinion, and it is not important to the basic validity of the proposal; the exact location of the rate line, or lines, can be determined after a particular pattern for rate making has been developed. For this study only the relative position of the rate line and the out-of-pocket costs is important.

There is one particular item which should be brought to the attention of our readers in order to avoid any misunderstanding. The Class-rate lines as shown in Charts II through V are not in their correct positions, i.e., the class 22½ rate should be drawn about where the class 32½ rate is shown in Chart II. These changes will materially affect some of the conclusions reached in the article.

Grant W. Cooke
Consulting Engineer

Industrial Development

New York

To the Editor:

May I express my thanks for the fine article on industrial development in the August 6 issue of Railway Age. It was an article that brought out not only the difficulties inherent in this important phase of a railroad's service to its customers but explained in an exemplary fashion the manner in which such services were provided.

It is believed that a continuous program of education on industrial development activities will be of inestimable value to your readers.

I did note one small error in the Industrial Development Box Score on page 28 of the issue under the column headed "Sponsors industrial parks or developments"; the New York Central was listed as "not." Actually we have approximately 40 industrial parks in various stages of completion and for which intensive development is being acomplished, so as to bring them to the state of readiness that will interest our industrial clients.

Thank you again for the fine article.

Otto W. Pongrace
Director of Industrial Development
New York Central

Retsof, N. Y.

To the Editor:

Just finished enjoying your "Breakthrough in '62" issue (RA, July 30) only to find that you have topped it with the Aug. 6 "Industrial Development" issue. . . . You are certainly to be commended for the timeliness and content of your publications.

C. R. Hayhurst
Industrial Development Department
Baltimore & Ohio

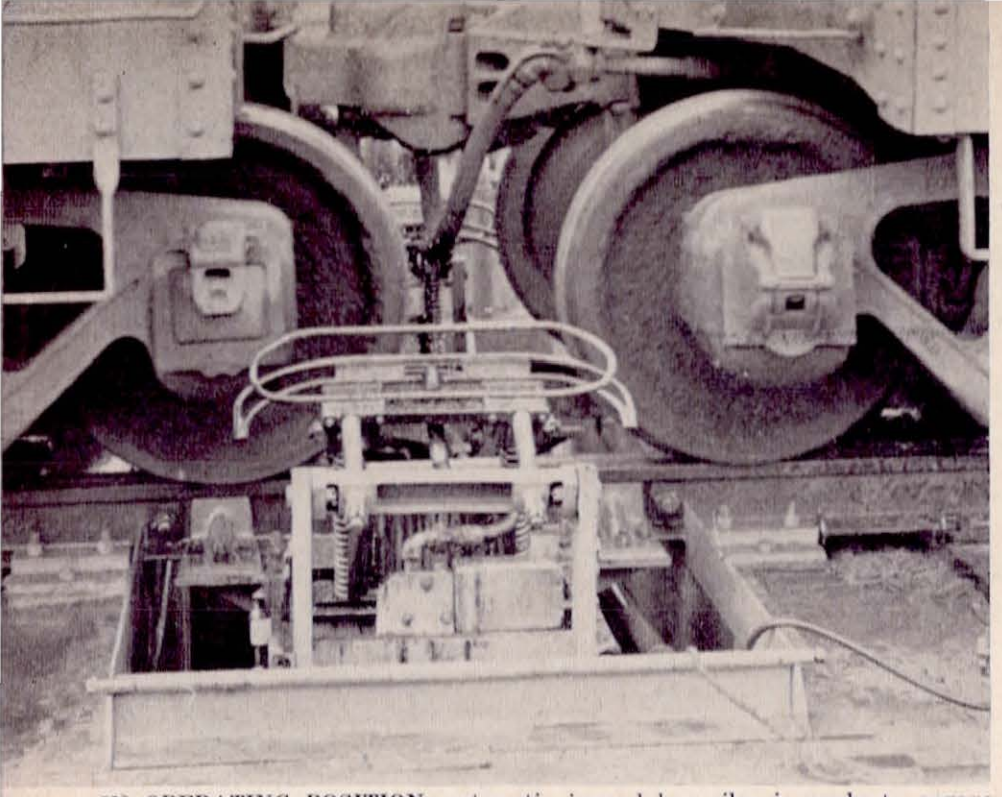
Current Publications

New Books

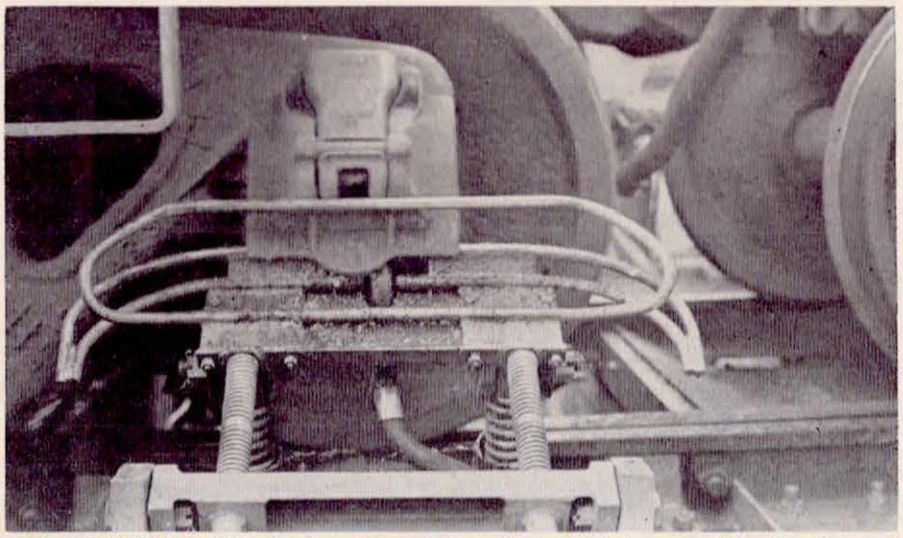
BRITISH AND EUROPEAN RAILROADS. Report on Inspection by the Association of American Railroads Delegation to British and European Railroads during July, 1960. 157 pages, illus. Association of American Railroads, Chicago 16. $3.

WORLD RAILWAYS, 1961-2. 435 pages, illustrations, maps, tables. Published by Sampson Low's "World Railways" Ltd. Handled in U.S. by Simmons-Boardman Books, 30 Church St., New York 7. $20.

Automatic Oiler Lifts Box Lids

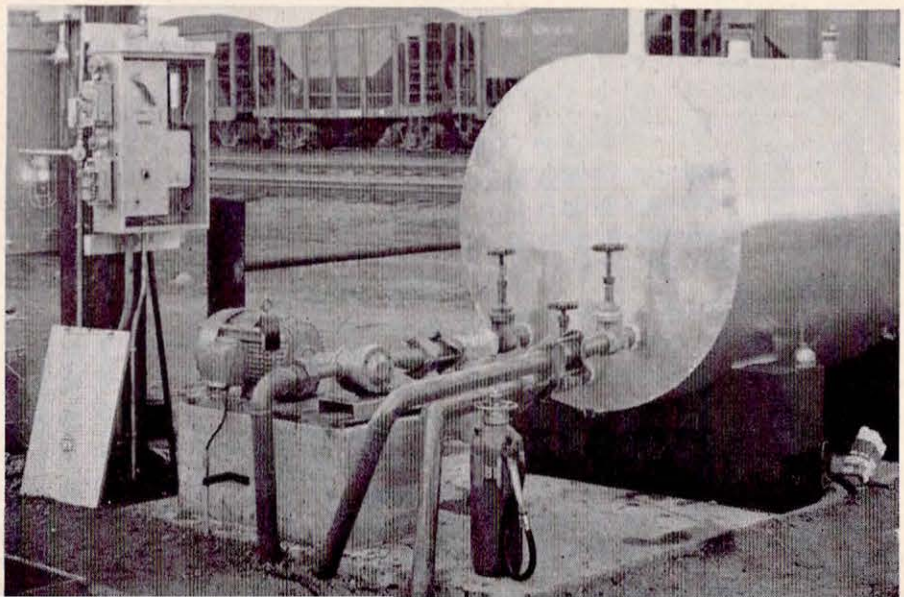


IN OPERATING POSITION, automatic journal box oiler is ready to engage journal box lid of GN ore car as it rolls by in yard at Allouez, Wis.



LID OPENING of 1½ in. is sufficient for oiling head to squirt in the 6 oz of oil; device then forces lid closed. Oiler misses about 1% of boxes.

OILER CONTROLS are operated manually to raise both units behind locomotive and lower them ahead of caboose; adjacent are pump and heated storage tank.



At Great Northern's Allouez, Wis., ore yard a machine developed and built by GN men promises to be a solution for an irksome barrier to automatic journal box oiling: the need for opening and closing box lids by hand.

The machine has already oiled more than 1,200,000 journals in the course of servicing GN's solid trains of ore cars at Allouez. Where formerly about eight man-hours were needed to oil the journals of the 220-car ore trains, the automatic oiler services trains in 15 to 20 minutes.

GN officers say direct savings from July 1, 1961, (when the oiler was installed) to Aug. 20, 1962, amounted to $13,600. In addition, savings of $14,800 are reflected in lesser costs for wheel changes — a saving attributed to the device's reduction of hotboxes.

In 1960, last full ore season before the automatic oiler was installed, there were 83 hotboxes. There have been nine hotboxes so far this season and GN estimates there will be a total of 12 or 13 by the end of the ore season. This can be attributed to the automatic oiler. GN operates 7,715 ore cars.

Development of the automatic oiler began in 1958 when GN mechanical and engineering forces were asked to design a machine that would open, oil and close journal boxes automatically as a train moved by. By 1960 a prototype machine was built that could (a) automatically open a journal box lid at train speeds up to nine miles per hour; (b) hold open the journal box lid approximately 1½ in. while (c) squirting a predetermined amount of oil into each moving journal box; (d) force the lid shut automatically; (e) compensate for train speeds, and (f) retract automatically to a below-rail position to clear engine or caboose obstructions.

The bugs were worked out of the prototype and an improved model of the automatic oiler was built at GN's Jackson Street Shop in St. Paul. Working on the project were GN's L. R. Amundson, mechanical engineering department draftsman; Mechanical Engineer R. E. Johnson; Superintendent of Shops James Summers, and Foremen William Johnson, Eugene Dock and Paul Benjamin. Patents covering vari-

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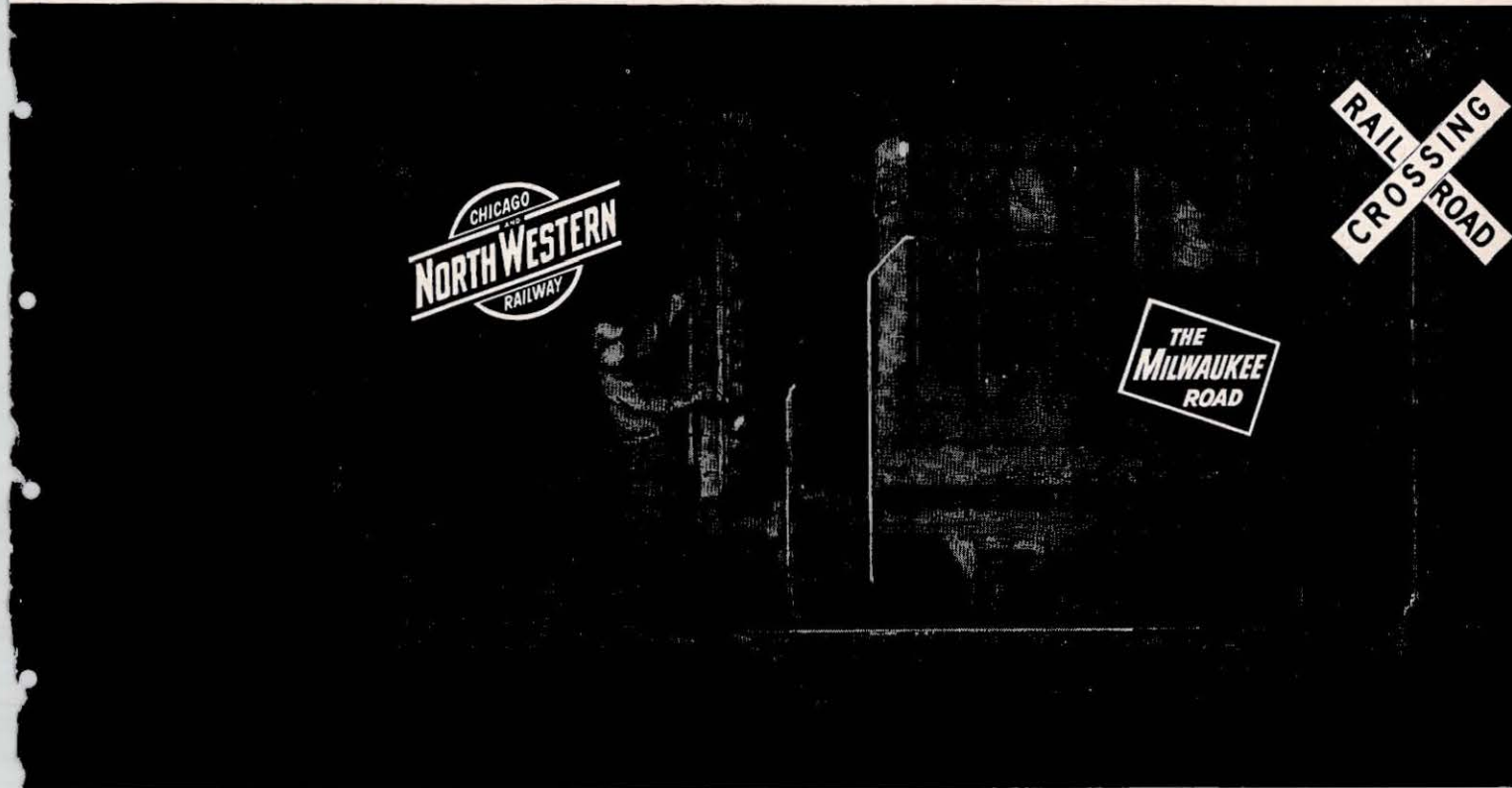

ous aspects of the new oiler have been applied for by the railroad. The machine is called the Amundson Automatic Journal Box Oiler.

Trackside foundations for the device were completed in 1961. The machine went to work oiling journal boxes on July 1 and stayed in operation until the end of the ore season, Nov. 3 of last year. The automatic oiler went back to work on March 15 of this year.

GN's cost analysis of the automatic oiler's performance (based on carman labor at $21.53 per day) reveals a saving of 10.07 cents per car or $20.64 per train on GN's more-than-200-car ore trains. Time analysis shows manual oiling requires 2.34 minutes per car, compared with a machine time of 5.8 seconds. Assuming it takes 20 seconds to open, oil and close a box and walk to the next box, it requires about eight man-hours to manually oil a train of 205 24-ft cars. GN's automatic oiler does it in under 20 minutes.

GN experience with the device over the equivalent of more than a full ore season indicates a more satisfactory level of performance. The machine misses about 1% of the boxes that go through, mainly because of deformed lids. Hard facing weld compensates for minor head wear during the season.

Here is what actually takes place when the automatic oiler is in operation: The train enters the machine area at 5 mph. After the locomotive passes over the machine and clears, a carman presses a button and the oiling heads automatically rise out of below-rail pits and begin opening journal lids, injecting six ounces of oil and closing lids. A treadle plate under the wheel flange furnishes the opening and closing force required. The device works best when train speed is maintained at 5 mph, though it can operate at 9 mph.

Oil for the machine is kept in a nearby 12,000-gallon tank car and is gravity-fed into a 500-gallon tank, where it is heated and kept at 120 deg. F. Oil pressure of 225 psi is furnished by a 35-gallon-per-minute hydraulic pump which is driven by a 7.5-hp electric motor.

GN's R. E. Johnson notes that the machine in its present form is only suitable where lower car configurations do not interfere with the operation of the heads. "Perhaps sensing devices can be developed which can efficiently control the automatic oiler to work with trains of mixed consist," he adds. "There is a good possibility that the oiler, which was designed primarily for GN's ore car operation, can be adapted for use in standard freight train service with proper improvement and modification."

One other possibility: adaptation of the automatic device to fit in with integral train operation.

Welded Rail Means Long Track Circuits

The use of long welded rails has caused many railroads to revise their track circuits so that longer circuits can be accommodated with fewer insulated joints. Typical of the practices involved in the changes are those of the Baltimore & Ohio, Pittsburgh & Lake Erie and Santa Fe.

"We have revised our track circuits to eliminate the insulated joints at cut sections when welded rail is laid," reports J. A. Phillips, assistant chief circuit engineer, B&O. "In automatic signal territory the block lengths vary from about 9,000 ft to 14,000 ft. On track signaled in both directions we are using a center-fed circuit with 75-rate coded energy for detection only. One 2-volt lead cell of a battery supplies energy to the code transmitter and to the track.

"Where track is signaled in one direction only, the same method is used, except the circuit is end-fed. A number of circuits of each type have been in service for approximately one year," Mr. Phillips states.

The use of welded rail has given rise to two insulated-joint problems. The first is brought about by the tremendous pressures developed in the expansion and contraction of long stretches of steel rail. The second is due to the necessity for cutting welded rail so that insulated joints can be inserted for track circuits.

Thus, a review of track circuit design is in order because of the insulated-joint maintenance problem and because of the loss of effectiveness of welded rail brought about by insulated joint cuts, V. O. Smeltzer, Santa Fe's superintendent of signals, system, points out.

"A few years back, new, more sensitive track relays were introduced in the signal field," Mr. Smeltzer says. "These were adopted as standard on the Santa Fe for new work because of their better shunting sensitivity and because they permitted longer track circuits. The latter has resulted in the elimination of some insulated joint locations in welded rail territory.

"For many years the Santa Fe has used a single insulated joint at battery-battery locations in part of our signal territory. This practice is followed extensively in welded rail territory.

"Early experiments with audio-frequency track circuits for the control of highway crossing protection indicated that these circuits would have value at some locations. We have several AFO installations that have proved satisfactory without insulated joints."

"Many track circuits require a positive cut-off point, as for example, at the home signal of an interlocking plant. We believe that two insulated joints are essential at such locations."

"Our practice is to test insulated rail joints periodically in welded rail territory. In non-welded rail territory we depend largely upon a visual inspection," Santa Fe's signal officer reports.

On the P&LE a considerable amount of mainline track has been relaid with welded rail sections, mainly consisting of thirty-four 39-ft rail lengths. This has not caused revision of the track circuits except at several locations which have a highway crossing protection installation. The welded rail lengths are laid and when passing a signal location, the rail is sawed and drilled and insulated joints are applied.

Island-circuit situations

At crossing protection locations which have island circuits, these circuits extend 70 ft on either side of the crossing, which, if 60 ft wide, gives an approximate length of 200 ft for use of welded rail sections that used better than five lengths of 39-ft rail.

C. E. England, P&LE field signal and communications engineer, reports that at other crossings, "protection circuits that were straight approach circuits overlapping the crossing, we did use audio-frequency overlay track circuits to eliminate insulated joints, allowing full lengths of welded rail to be laid.

"At one location where the crossing protection approach was split in two sections, due to there being an interlocking at the crossing location, we used AFO track circuits in the first or automatic signal section of the approach to eliminate insulated joints," states Mr. England.

"The use of welded rail required no other revision than that above. We have not used any center-fed track circuits, since we primarily use coded track circuits."

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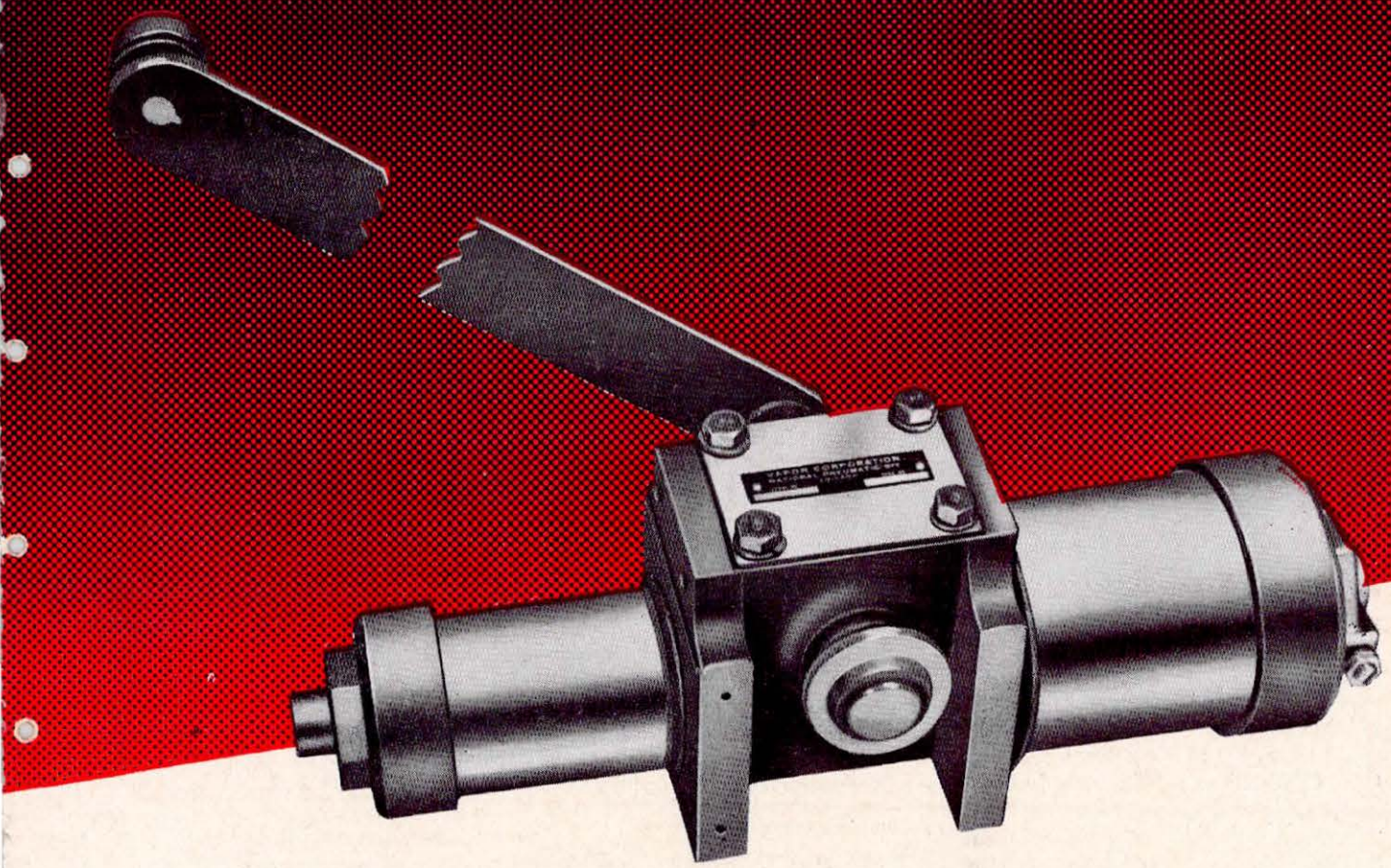

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► **The Story at a Glance: Private carriage may yet prove to be the strongest catalyst in bringing rail and motor common carriers together. Spector Freight System and the Pennsylvania last week joined forces on a Plan V piggyback move.**

Beyond the usually-cited mutual advantages of Plan V arrangements, Spector officers indicated, the plan should open the way for recapture of traffic lost to private carriers and for retaining traffic now in danger. The first Spector-PRR Plan V move involves brass articles, New Brunswick, N.J., to Chicago. But coming soon: similar arrangements with Erie-Lackawanna and, in all probability, others with the Pennsylvania.

Everybody gains and nobody loses, as Spector Freight System views its entry into Plan V piggyback, via a joint rate, through route arrangement with the Pennsylvania.

The two carriers have worked together in Plan I arrangements since the mid-1950s—but agreement on a rate covering movement of brass articles from New Jersey to Illinois is their first venture into coordinated transport of the Plan V variety. Under the published tariff, Spector moves its trailers (loaded at New Brunswick) to the PRR's Truc-Train terminal at Kearny, N. J., where the vans are driven aboard piggyback flats for the rail move to Chicago. Spector takes over again at rail destination for the final move to the consignee's dock.

W. Stanhaus, president of the motor common carrier, said the New Brunswick-Chicago move is merely the first of many which Spector hopes to work out for other points and other commodities. Future rates, he indicated, may include such points as Baltimore, Indianapolis, Kansas City, Milwaukee, St. Louis and St. Paul, as well as other cities served by Spector "so that the full operating rights of both Spector and the railroads may be realized."

Under the Plan V arrangements as envisioned by the truck line, salesmen for each company will solicit business for the joint movement—though in off-line rail cities rail salesmen may be the "tip" providers, with Spector personnel making the actual sales contacts with prospective users.

Spector notes the commonly-cited advantage of the Plan V to the carriers—that it, in effect, extends one's territory to embrace the territory of the other. But it's on the issue of private carriage that the trucking company waxes most enthusiastic.

Roger Gerling, vice president-marketing for Spector, commented that "one of the most important things involved here is the recapturing of private carriage freight and the prevention of other freight from going to private carriage . . . I believe the threat of private carriage is responsible for a generally warmer climate existing between common carriers to coordinate their services."

Rates, Mr. Gerling indicated, will generally be lower than all-truck rates —but not lower than Plan III piggyback rates (under which railroads haul shipper-owned trailers or containers piggyback at a flat loaded-or-empty rate).

Shippers, Spector said, will also benefit from the concept of single-carrier responsibility. The motor carrier assumes full responsibility for pickup, handling and delivery; the shipper receives a single bill; and he has but one carrier—Spector—to deal with in the event a shipment is damaged (it's then up to Spector to reach its own agreement with the railroad on damage).

Thus far, Mr. Gerling said, shippers are showing "a lot of intense interest" in the Spector coordination plan (named C-T-R, for Coordinated Truck-Rail). But, he added, "the acid test will come when we see how many shippers request specific rates for specific moves."

Mr. Stanhaus said the plan was "designed especially for the shipper who desires coordinated truck-rail service under one-company responsibility . . . The shipper now has available the 'customerized' service-oriented approach of the trucking industry combined with the economies of railroad freight service. We have high hopes that service of this kind will be instrumental in winning back for the common carriers much of the traffic that has been lost to private carriage and to various other plans."

The eager approach to the plan, he added, hasn't been limited to Spector or to the shipper involved: "We are especially encouraged by the enthusiasm of the Erie-Lackawanna and the Pennsylvania management teams over the potential for both shippers and carriers."

Mr. Stanhaus noted comments by Commerce Secretary Hodges to the effect that "the transportation industry is afflicated with cancer and that one of the critical problems is the failure of the various modes of common carriage to unite for the good of all." The Spector reaction: "Secretary Hodges was right—but our C-T-R plan is an important advance in overcoming that ill."

In recent years, Plan V has been a much-potential, little-action plan—with certain notable exceptions. Southwestern lines, particularly Missouri Pacific, has moved into extensive Plan V arrangements. Other roads in the same territory—Frisco, Katy, Kansas City Southern, Texas & Pacific—have taken the plunge (and KCS was among the first to tie-in with a truck line in Plan V).

Plan V on a scale approaching the transcontinental, however, has been more dormant than active. In the East, New York Central has been the major exponent of Plan V, and indications are that wariness on the question of divisions—because of relatively short prior and subsequent truck hauls—may have been a major factor slowing PRR's entry into the field. Under the Spector arrangement, however, the motor carrier apparently has a long enough haul to minimize divisions problems. (Spector officers said divisions will be negotiated individually for each rate to be established.)

Fewer Freeways?

City planners' fondness for freeways could fade considerably if a government-sponsored long-range financial aid plan for capital improvements in mass transportation can be set up, according to John C. Kohl, assistant administrator (transportation), Housing and Home Finance Agency.

"With federal grants becoming available for transit facilities and equipment," he noted recently, "any pro-highway bias in local decisions can be removed. Quite naturally, communities will favor those developments for which financial assistance is available, and the highway improvement . . . has been the only one eligible for aid to urban transportation."

(See commentary on Chicago Area Transportation Study, p. 59.)

The CATS Report

A new transportation study for Chicago got a cool reception from Chicago politicians and newspapers last week. Thoughtful second-lookers began asking if the study's recommendations would not result in making another Los Angeles out of Chicago.

The CATS report (Chicago Area Transportation Study) was six years in the making and cost $3.5 million. It was paid for by the federal government (72%), the state of Illinois (14%), Cook County (7%), and the city of Chicago (7%).

The CATS recommendations, delivered in quasi-sociological phrases, have many generalizations flourishing as facts as CATS' highway-oriented authors tell the need for more and bigger expressways. Samples: "Travel is the lubricant which oils the machinery of urban society. . . . While public transit services are essential, the bulk carrier of people is, and increasingly will be, the automobile. . . The bulk of travel must move over the road. This means that the majority of projected improvements must be directed toward the road system."

Briefly, the CATS report calls for:

- More than $2 billion (in 1960 dollars) in new expressways and arterial street improvements.
- A separated walkway to aid commuters in getting to Loop destinations from suburban stations.
- $185 million to improve Chicago Transit Authority elevated-subway routes.
- Improved suburban railroad equipment and operation and elimination of local traffic. Commuter railroads are to be express carriers from the suburbs, carrying whatever traffic is not riding the expressways.

Railroads serving Chicago commuters, in short, are to perform the most expensive of the commuting chores in 1980 — the long haul where equipment can be used only once during each rush-hour period.

In the overall, the report does not display any great understanding of the fact that, in Chicago, private railroad companies compete with government in providing transportation to Chicagoans.

The CATS introduction has a noteworthy statement: "[Our] . . . concern is not what is, or what will be, but rather what *ought* to be." (CATS italics.) This is refreshing candor for a report whose policy-making authors are 23 men who, with the exception of two men (CATS Director J. Douglas Carroll, Jr., and his assistant director, E. Wilson Campbell), are employees of U.S., Cook County, Du Page County or Chicago highway departments or the Chicago Transit Authority.

Inquiries at all commuter railroads in Chicago revealed that CATS researchers failed to ask any questions or to seek carrier advice or help. One railroad reported that a CATS policy man did show up but talked only in generalities, finally asking for the amount of money that railroad had invested in commuter facilities.

The projections upon which CATS has master-planned a dazzling pattern of highways and expressways are: a Chicago population that will increase from today's 5.5 million to 8 million by 1980; a suburban population with only one family in 20 not owning a car; more trips will be made by highway, from today's 75% to 1980's 85%; and, of interest to railroad men, travel by public transit will increase only slightly above present levels.

The role of public carriers is defined in bone-chilling fashion by the highway men's report: "Transport systems, while aiming at efficiency, also must provide a variety of services to meet the needs of a variety of individuals. For example, many people are too old or too young or without the money to own and drive cars. Unless society is to restrict the movements of these people, it must provide a good quality of public transportation service. . . Clearly, for these people, for standby purposes, and for serving peak demands and special areas, reasonably priced public transportation services must be available and operative."

One can only conclude that the highway men writing CATS recommendations, accustomed as they are to having the public purse to finance such "improvements" as they plan, are unaware of the absurdity of relegating rail commuter lines to standby service, for youngsters, oldsters and indigents, and, at the same time, insisting that they improve because "without such service" the policy of intensive highway development could not be supported.

The possibility of limiting city automobile use is dismissed in a paragraph. Says CATS: "Some planners have advocated a more fundamental attack on [transportation system] operating costs. A suggestion, often proposed for reducing these costs, is for more travelers to use public transportation facilities. To the extent that more travelers divide the cost of moving one vehicle, the per capita share can be reduced. But it appears that to increase the average loads of transit vehicles would require greater headway between vehicles in order to increase the passenger accumulation. In this fashion, additional time is spent waiting at stations in order to conserve on operating cost. Since time is valued, travelers become increasingly reluctant to wait and so the less convenient service tends rapidly to offset any savings in operating costs."

Newsmen in Chicago soon began digging into the report itself. And Chicago's Mayor Richard J. Daley was quoted as saying that he and other city officials did not question the CATS projections about 1980 —but that there would be other ways of handling the mass movement of people than by building more expressways. Chicago's mayor added: "There are things more important than having motorists go through your town on expressways to save 10 or 15 minutes. The study does not relate expressways to the effect they will have on neighborhoods or on urban renewal programs. Isn't it the hope throughout the nation that people will more and more use mass transportation? We know the answer won't come by private auto. Los Angeles found that out."

—John D. Mitros

DAVID M. DALY
Assistant
Vice President-
Traffic
Bristol-Myers
Products Division
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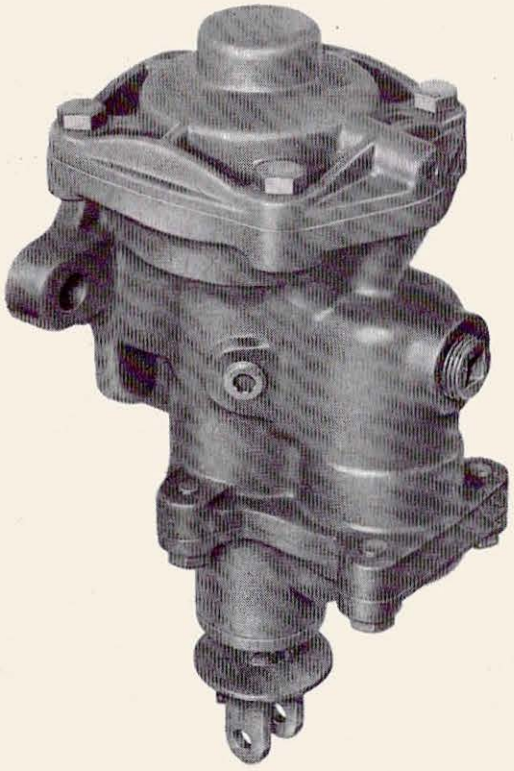
A DESIGN TO MEET THE NEW SPECIFICATIONS

new QRB

BRAKE CYLINDER RELEASE VALVE



The New QRB Brake Cylinder Release Valve is engineered to meet new A.A.R. specifications and, at the same time, utilize, as far as possible, all parts used in existing QRR Valves. Application has been made for required Certification.

1944—The New York Air Brake Company originated the Brake Cylinder Release Valve with the Model QR. **1949**, when A.A.R. specifications were established, again it was The New York Air Brake Company . . . ready with an advanced Model QRR!

Now, **1962**—prepared to meet new A.A.R. specifications, is a most ingenious new design...the New QRB!

- The New QRB retains the basic and proven valvular construction and snap action of earlier models in an advanced new design.
- The New QRB can be mounted on all existing mounting brackets and adapters.
- The New QRB utilizes internal parts of the QRR . . . thus resulting in a minimum OBSOLESCENCE of Parts Stocks.

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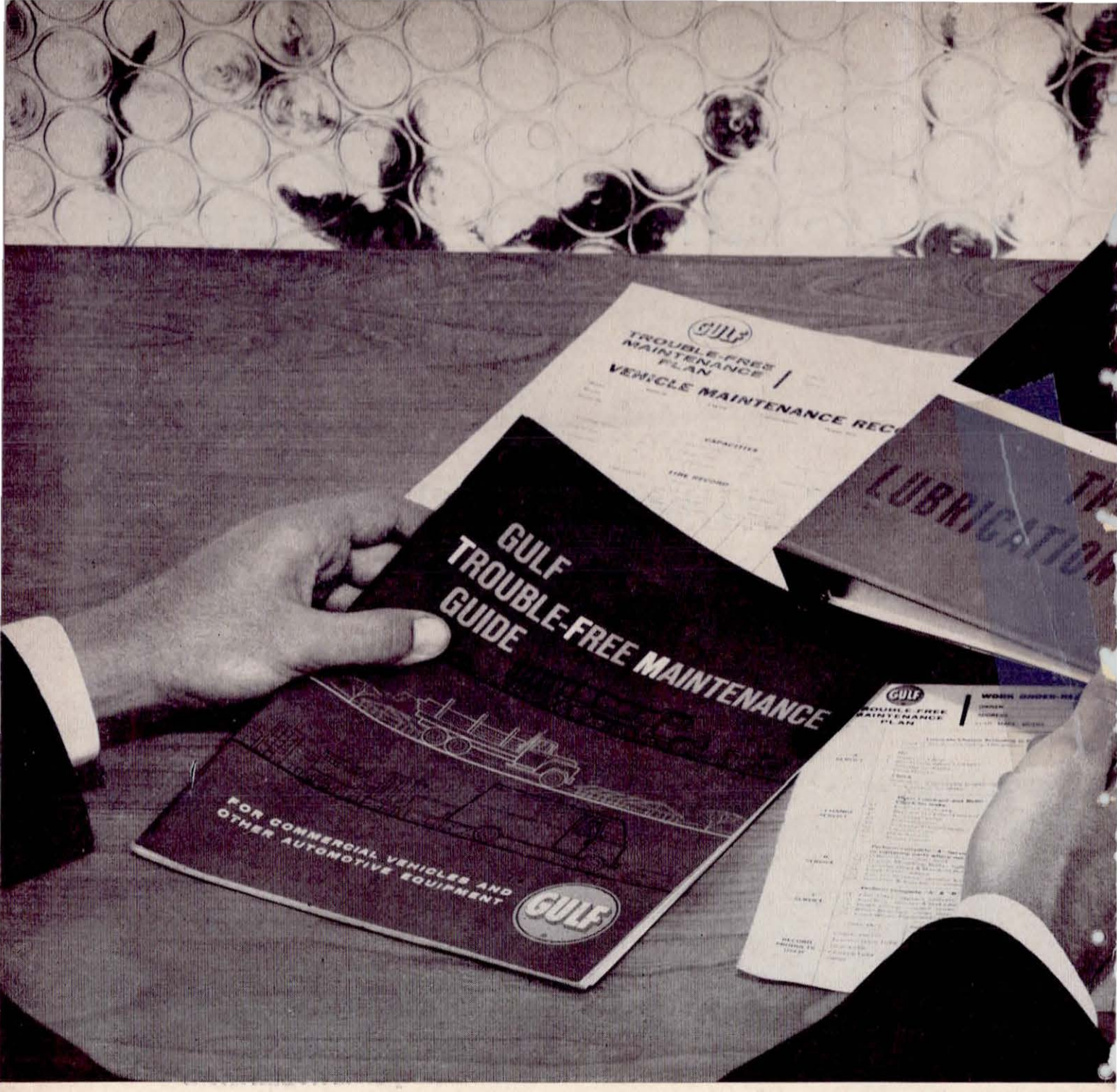

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Gulf's Trouble-Free Maintenance Plan provides a simple and practical method for truck preventive maintenance procedures which can help you make substantial savings in operating your truck fleet.

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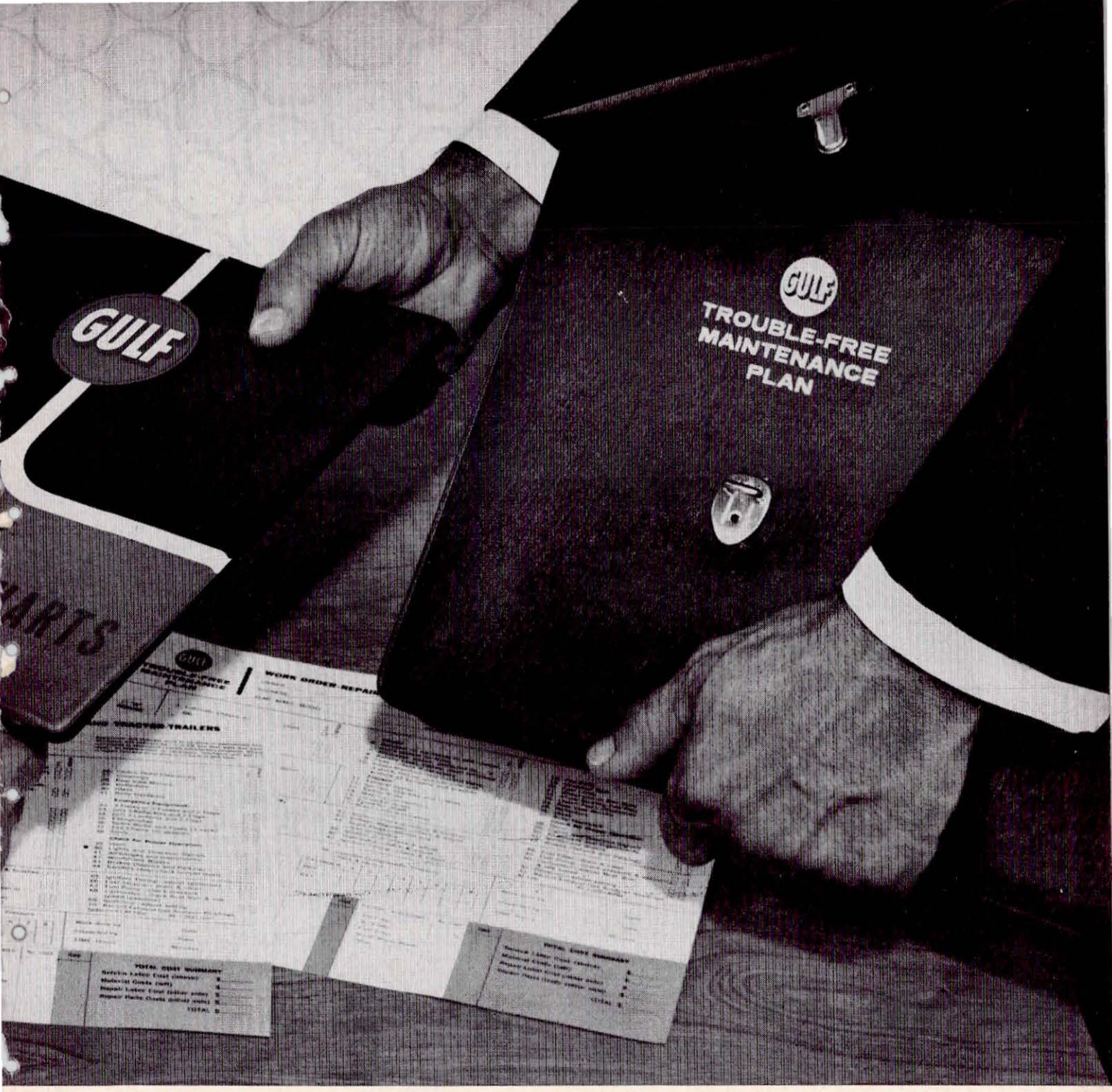

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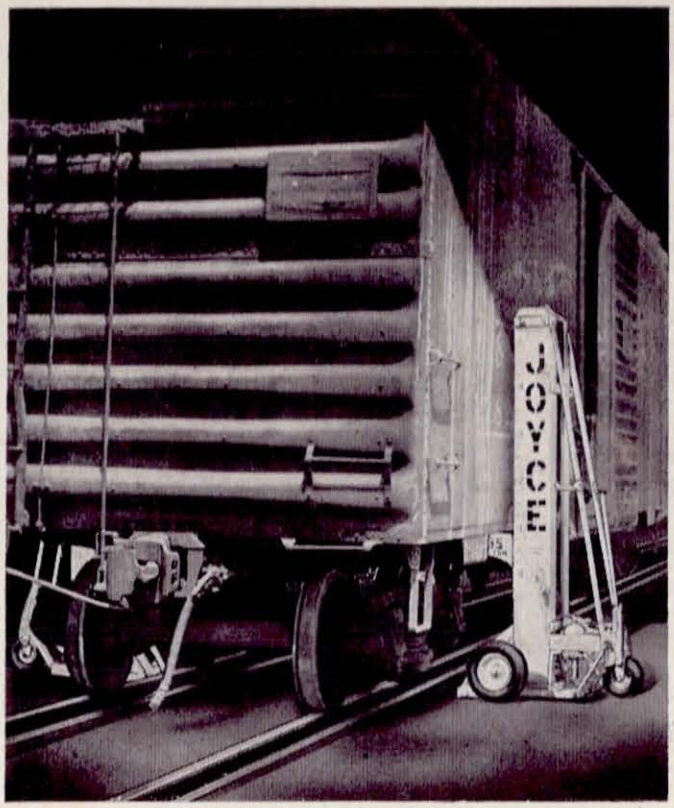

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JOYCE Spot Jack Systems, for lifting railroad cars and general shop work, consist of two or more Model 35 AHL 35-ton capacity, air motor jacks. These aluminum alloy, all-purpose jacks involve low initial cost, require no installation excavation, and are light enough to be trundled and positioned by one man. In lowest position, jack lifting toe is 26½" high—only a few seconds from contact with car, thus eliminating time-consuming travel from truck level up to load. Jacks can be used singly for various shop jobs, or as synchronized systems of 2 or 4 jacks, with control pedestal located remotely to give operator clear view of work. 90 PSI track air powers the Joyce system.

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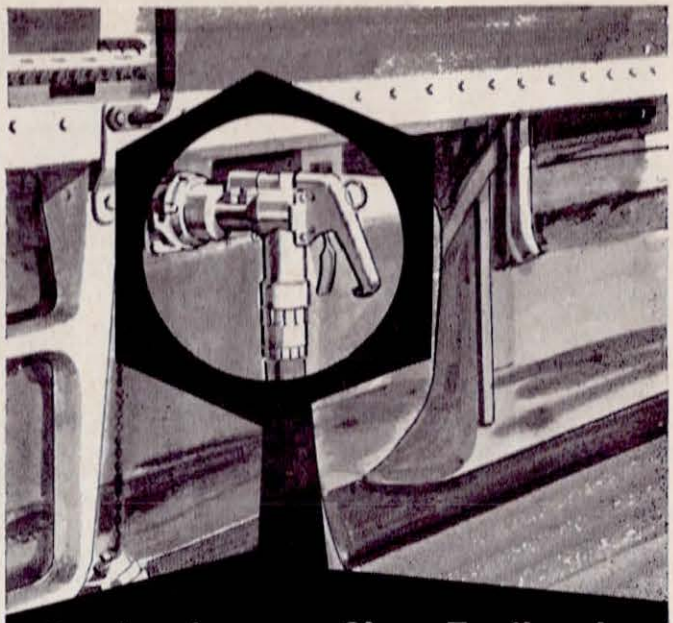
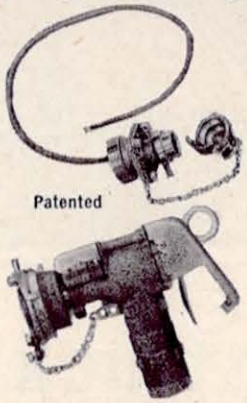


here's why more Class I railroads have converted 100% to Buckeye automatic diesel refueling than to any other system!

The Buckeye System cuts refueling costs. Automatic shut-off eliminates fuel loss, spillage, and contamination. Saves time and labor. Saves money, too!

But, most important, the Buckeye Automatic Diesel Refueling System uses just two basic component parts:



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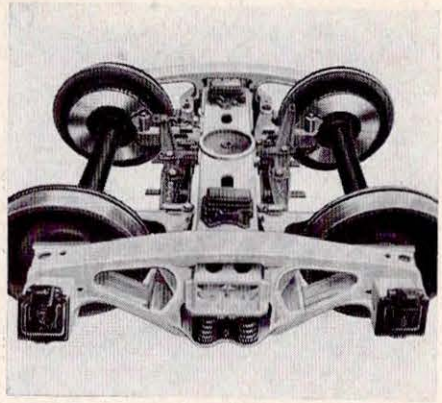
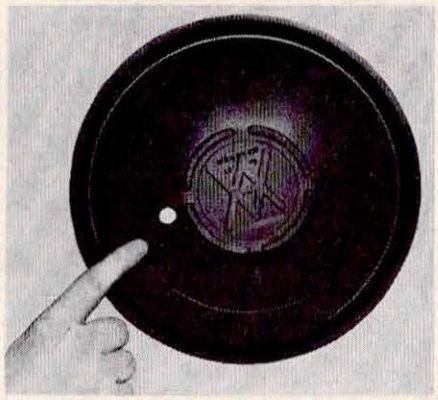
NEW PRODUCTS REPORT *(Continued on next page)*



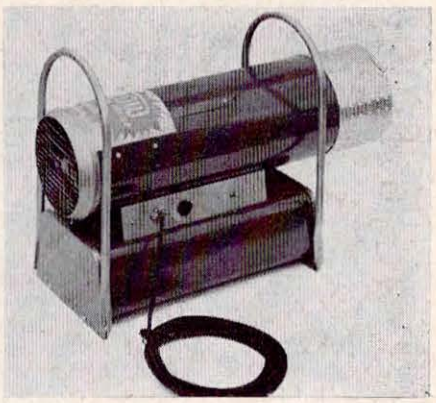
Mechanical Disc Brake (RA-1)

Brake X, a mechanical disc brake first introduced in 1956 for the standard 33-in. wheel truck, is now available for trucks with 36-in. wheels used under freight cars of 100-ton capacity and for trucks with 28-in. wheels used under low-deck piggyback cars of 70-ton capacity. The brake has four single-surface braking discs on which composition brake blocks act and is powered by the conventional body-mounted air-brake cylinder. *Buffalo Brake Beam Co.*



Rubber Products (RA-2)

"White Mark" rubber compounds for gaskets, packing cups, and seals on freight and passenger-brake equipment are said to provide effective sealing through a 30% greater range of temperatures—down to —50 deg F in northern areas and up to 200 deg F in thawing sheds. White Mark on packing cups also denotes addition of a protective coating which decreases friction, resists wear, and shows deterioration of brake-cylinder lubricant. *Westinghouse Air Brake Co.*



Space Heater (RA-3)

The 45-lb Model S80A Porto space heater with built-in thermostat regulates temperature to warm cars and loading platforms. It burns kerosene, No. 2 fuel oil, or diesel fuel oil, and produces 80,000 Btu per hr at 450 cfm. Fan, driven by a 1/8-hp motor, can be plugged in to any 115-volt, 60-cycle outlet. Heater can also be used for thawing snow and ice on locomotives and freight cars and for drying wet or damp areas. *Stow Manufacturing Co.*

Test Unit (RA-4)

Alternating current and half-wave direct current for detecting both surface and sub-surface defects in ferrous parts and material are furnished by the portable type KH-09 900-amp magnetic particle test unit. The 70-lb unit operates from 220 or 440 volts, 60-cycle, single-phase current. A Carry-All truck is also available. A 700-amp model, KH-07, for applications requiring lower amperage, operates from 115 volts, a-c. *Magnaflux Corp.*

Spray Painting Unit (RA-5)

The Titan 40-to-1-ratio airless spray painting unit is available in two models— a 5/10-gallon unit mounted on a roll-around cart, and a 55-gallon model for pumping heavy viscosity materials direct from original containers. Each unit, which can handle two spray guns, features a 6-in.-diameter air motor with a 5-in. pump stroke. Maximum material delivery is 1.4 gpm, with continuous delivery recommended at 1.0 gpm. *Binks Manufacturing Co.*

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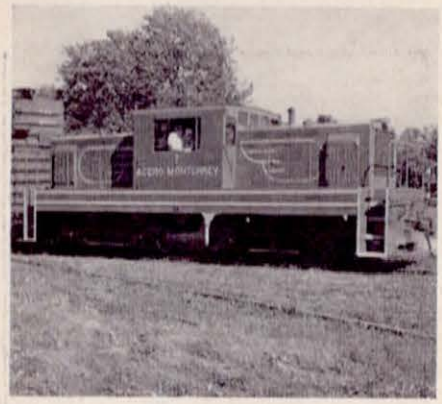
NEW PRODUCTS REPORT

(Continued from preceding page)

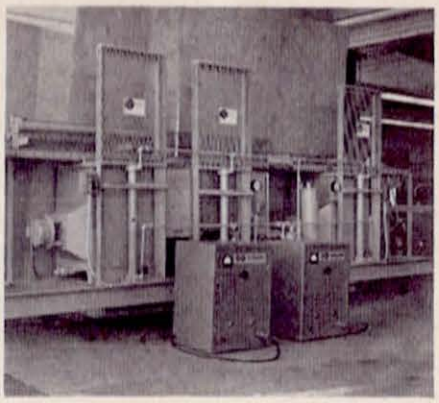


Hydraulic Locomotives (RA-6)

Power-shifting and heavy-duty shaft drives feature the CR series of diesel-hydraulic locomotives in models from 40 to 120 tons, with wheel arrangements from 0-4-0 to 0-6-6-0 and engines to match power and speed requirements. The combination of power-shifting and diesel-hydraulic drive is said to give smooth power application with no loss of load when shifting, even under full engine power. Wheel-and-rail adhesion is said to be high. *Plymouth Locomotive Works.*

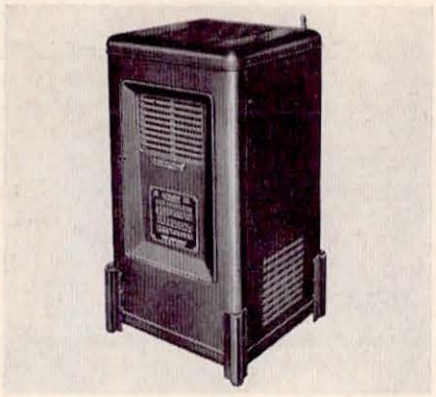
Repair Truck (RA-7)

The Bantam Rail-Roader, a repair truck designed for use in changing car wheels, couplers, etc., has mechanically operated dollies on front and rear, enabling it to travel to the job site either over highway or on rails. It has a four-man crew compartment, 50-ton electrically driven mechanical jacks, and a 6,000-lb-capacity hydraulic crane. The carrier features full reversing transmission for equal speeds forward-reverse for track operation. *Schield Bantam Co.*



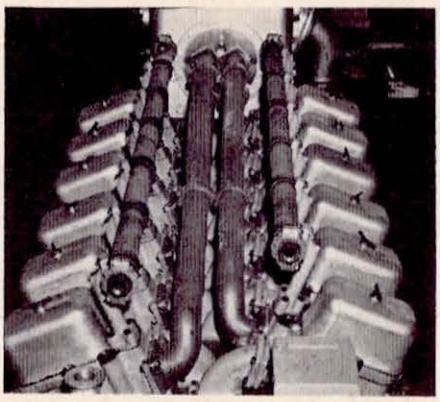
Cleaning Tanks (RA-8)

The cleaning unit illustrated, built to meet a specific need, is a fully automatic, self-feeding and self-ejecting unit, consisting of an agitated Turco Turbulator tank in the first stage, an ultrasonic cleaning tank in the second stage, and a Turbulator rinse tank in the third stage. It was designed to vibrate soils away from inaccessible areas in fuel pumps and injectors, governors, bearings and other components. The tanks are available in 14 sizes. *Turco Products, Inc.*



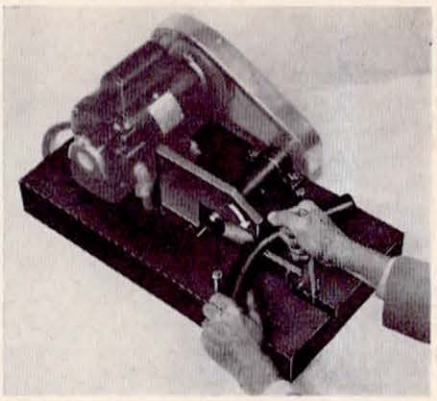
Caboose Heater (RA-9)

The Caban Junior caboose heater features radiant and convective heat, balanced draft control, and a shock resistant fuel valve. The unit has an output of 35,000 Btu and operates on diesel oil, kerosene, or No. 1 fuel oil. It is said to heat for a week or more without refueling and to operate with constant efficiency when car is standing still or running. The unit can also be used for heating small buildings, including switchman and crossing guard shelters. *Vapor Corp.*



Exhaust Manifold (RA-10)

The gas-tight feature of an alloy cast-iron manifold for the Alco 12-cylinder Model 251 diesel engine is achieved by the elimination of slipping joints; by the use of ring-like bellows at the turbocharger which provide for expansion and contraction during engine temperature changes, and by a reduction in the number of mating joints. There is no metal shroud over the manifold. Each part can be removed individually for inspection or repair. *Alco Products, Inc.*



Hose Cutter (RA-11)

With the Band-It hose cutter, two-wire braid hose up to 1¼ in. is cut instantly with no flying debris. The cutter slices through insulated electrical cable, wire-braid, and non-wire braid hose without binding and without frayed or ragged ends. It may also be used for cutting plastic tubing, insulated electrical cable, and rope. It is furnished without motor, pulley, guard or belt. Shaft may be equipped either with a pulley or flexible drive shaft. *Band-It Co.*

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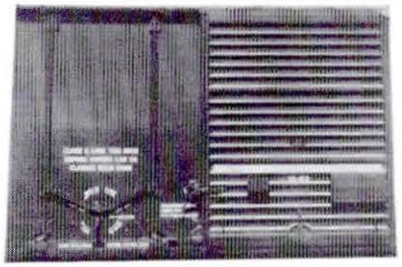
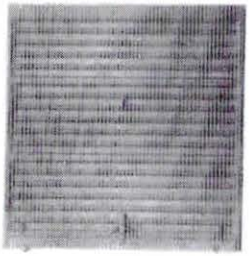
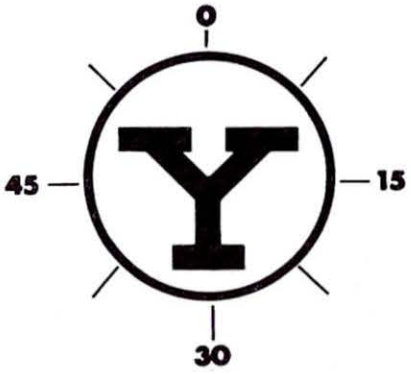
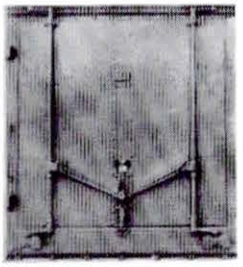
TO SAVE YOU MONEY--

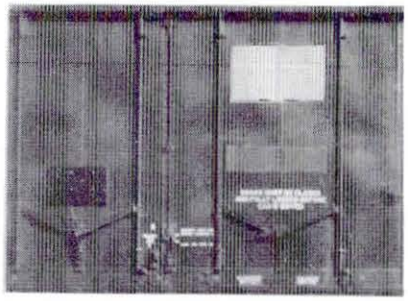
--MEET SHIPPERS NEEDS











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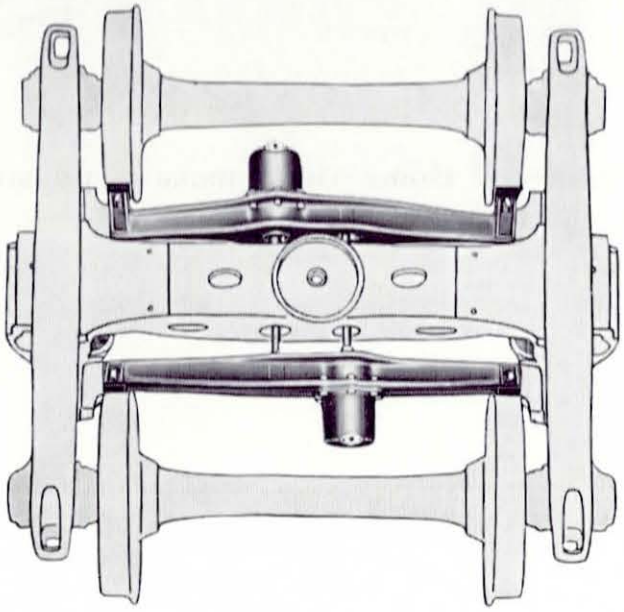
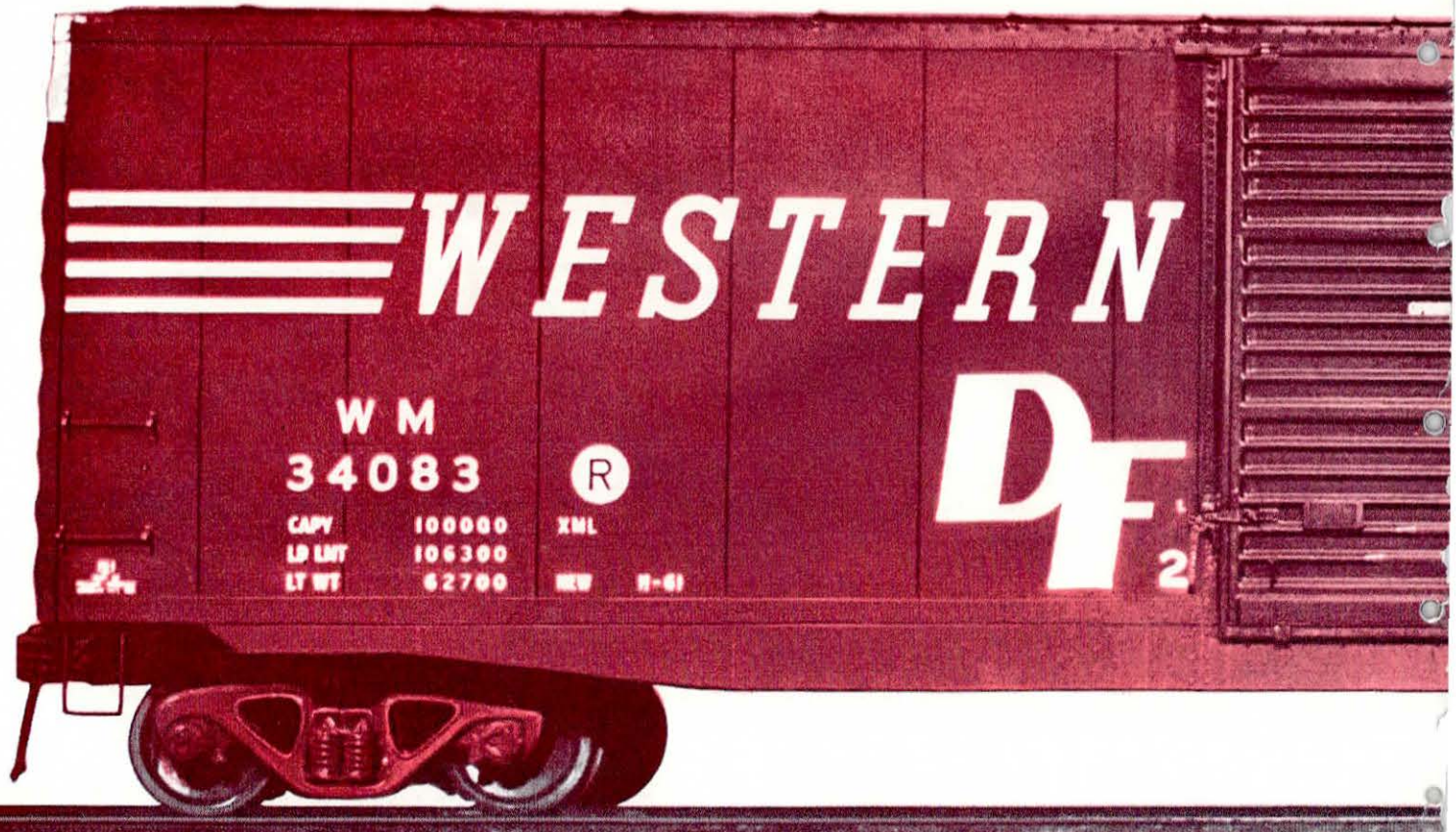
The progressive Western Maryland specifies WABCOPAC® brake units on new box cars





A good example of progressive thinking that prevails on the Western Maryland, is illustrated by their decision to specify WABCOPAC® Brake Units on a recent fleet of new box cars. Replacing a system of complicated beams, levers and rods running along the underside of the car, the Western Maryland utilizes WABCOPAC Brake Units that compact foundation brake parts into easily assembled truck components. Each truck assembly consists of two identical WABCOPAC Brake Units, each with a cylinder, joined by push rods and equipped with COBRA* Composition Brake Shoes.

WABCOPAC Brake Units make it possible to lower car profiles and weights, and reduce brake rigging maintenance. Lower profiles permit greater overhead clearance for extra capacity cars.

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WABCO

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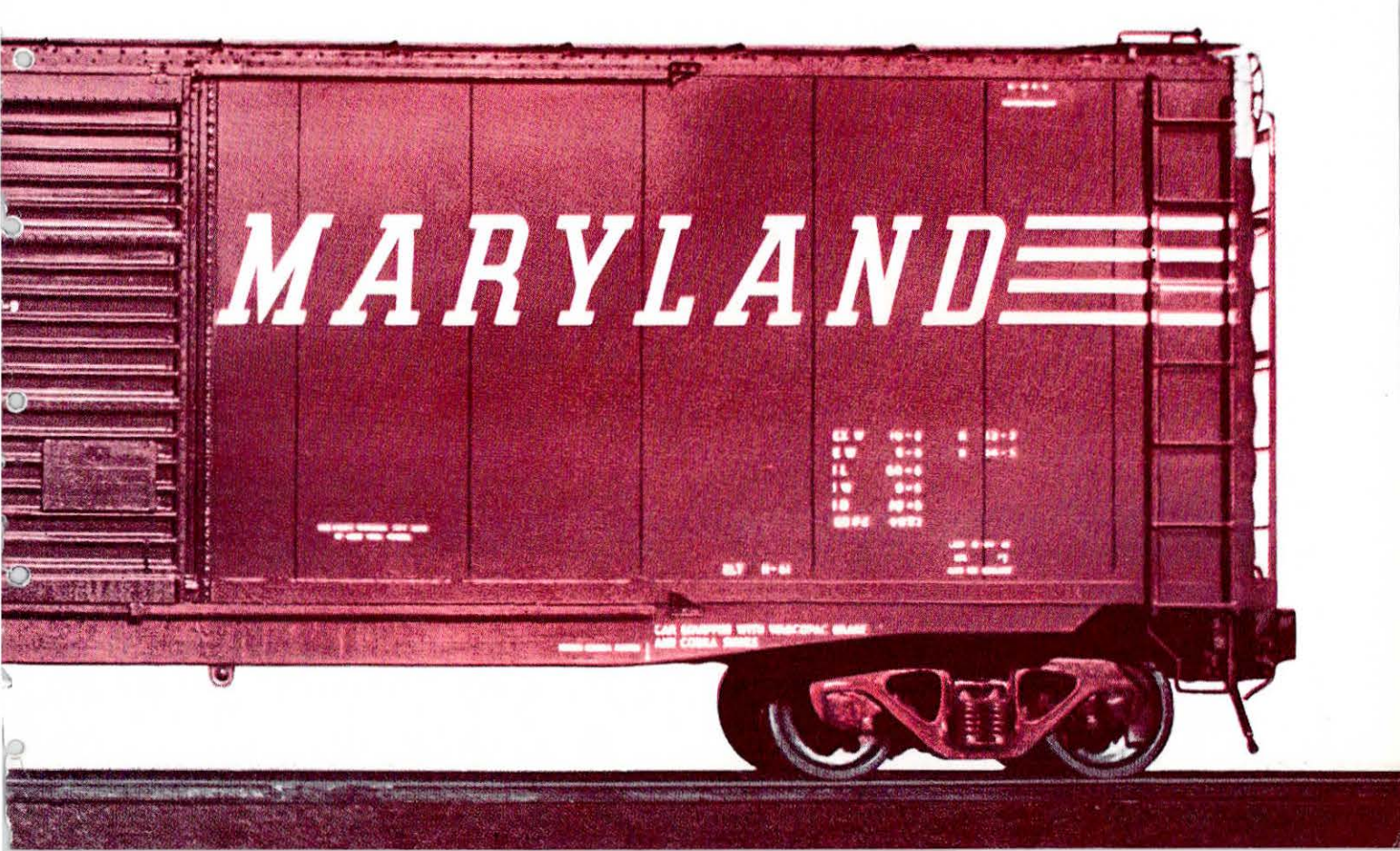

The WAUGH-GOULD

TYPE 700

is the friction rubber draft gear . . . the high capacity gear giving

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WAUGH EQUIPMENT COMPANY

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Market Outlook

Carloadings Drop 14.8% Below Previous Week's

Loadings of revenue freight in the week ended Sept. 8 totaled 495,286 cars, the Association of American Railroads announced on Sept. 13. This was a decrease of 86,134 cars, or 14.8%, compared with the previous week; a decrease of 18,934 cars, or 3.7%, compared with the corresponding week last year; and an increase of 15,221 cars, or 3.2%, compared with the equivalent 1960 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, September 8

District	1962	1961	1960
Eastern	69,867	73,566	75,083
Allegheny	82,776	87,834	46,999
Pocahontas	43,021	44,039	43,127
Southern	94,162	92,445	92,940
Northwestern	69,948	82,449	83,483
Central Western	102,667	101,110	103,969
Southwestern	32,845	32,777	34,464
Total Western Districts	205,460	216,336	221,916
Total All Roads	495,286	514,220	480,065
Commodities			
Grain and grain products	44,389	40,480	40,881
Livestock	4,219	4,758	5,589
Coal	94,128	91,812	88,104
Coke	5,816	7,219	4,609
Forest Products	30,643	32,164	32,005
Ore	41,382	49,709	44,714
Merchandise l.c.l.	18,972	24,644	27,249
Miscellaneous	255,732	263,434	236,914
September 8	495,286	514,220	480,065
September 1	581,420	597,730	577,206
August 25	582,959	592,265	594,964
August 18	582,626	595,085	596,464
August 11	565,881	591,062	600,021
Cumulative total, 36 weeks	17,792,264	19,245,239	21,431,353

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Sept. 1 totaled 14,141 cars, compared with 12,356 for the corresponding 1961 week. Loadings for 1962 up to Sept. 1 totaled 464,830 cars, compared with 385,135 for the corresponding period of 1961.

IN CANADA.—Carloadings for the 10-day period ended Aug. 31 were not available as this issue went to press.

New Equipment

FREIGHT-TRAIN CARS

► *Frisco*—Ordered 60 89-ft cushion underframe flat cars equipped with Paragon bi-level auto racks and Brandon tie-down equipment from Thrall Car Manufacturing Company. Deliveries will start in mid-November and be completed by mid-January, 1963.

► *New York Central.*—Ordered 50 all-steel, bay-window cabooses from its Dispatch Shops at East Rochester, N.Y., at a cost of approximately $850,000. Delivery is scheduled to begin in December.

► *Southern Pacific.*—Has purchased 40 Tenelon stainless-steel covered hopper cars from Greenville Steel Car. Order for the three-compartment, 4,000-cu ft, 100-ton cars to handle food products, powdered chemicals and other bulk commodities followed the past year's testing of the prototype U.S. Steel Tenelon covered hopper (RA, April 17, 1961, p. 16).

► *United States Railway Equipment Co.*—Has leased 200 50-ton box cars to the Soo Line. Delivery is to be completed by Jan. 1, 1963.

► *Union Pacific.*—Ordered nine 86-ft mail storage cars from the Budd Co., Philadelphia. Delivery will be made in the second and third quarters of 1963.

LOCOMOTIVES

► *Baltimore & Ohio*—Ordered 77 2,250-hp GP30 units from EMD. First four units will be received Oct. 1; deliveries will be completed by mid-December. Under a replacement arrangement, B&O will turn in 77 FT and F3 units. B&O's order is reportedly the largest single order for GP30 units since EMD introduced the new model in autumn of 1961.

FOREIGN

► *Companhia Vale do Rio Doce (Brazil).*—Ordered 11 1,950-hp G-16 diesel-electric locomotives from General Motors Overseas at a cost of approximately $2,500,000. The new units, to be built by EMD at La Grange, Ill., will be delivered this year.

► *Irish Transport Co.*—Ordered 37 950-hp Model JL8 diesel-electric locomotives from General Motors Overseas for delivery this fall. Cost is estimated at $6,000,000. The locomotives will be built by EMD at La Grange, Ill. Order is the second which the Irish Transport Co. (Coras Iompair Eireann) has placed with GM. A June 1960 order covered 15 Model GL8 950-hp units.

► *Japan.*—Invites bids until Dec. 12 for 180 electric passenger cars for the new standard-gage Tokaido line. Details are available from the Rolling Stock Section, Purchasing and Stores Dept., Japanese National Railways, 1-1 Marunouchi, Chiyoda-ku, Tokyo.

► *Korean National Railroad.*—Will purchase 30 diesel-electric locomotives from a U.S. manufacturer with proceeds of an $8.3 million loan from the Agency for International Development (AID). The new units will replace 60 steam locomotives now in operation in South Korea.

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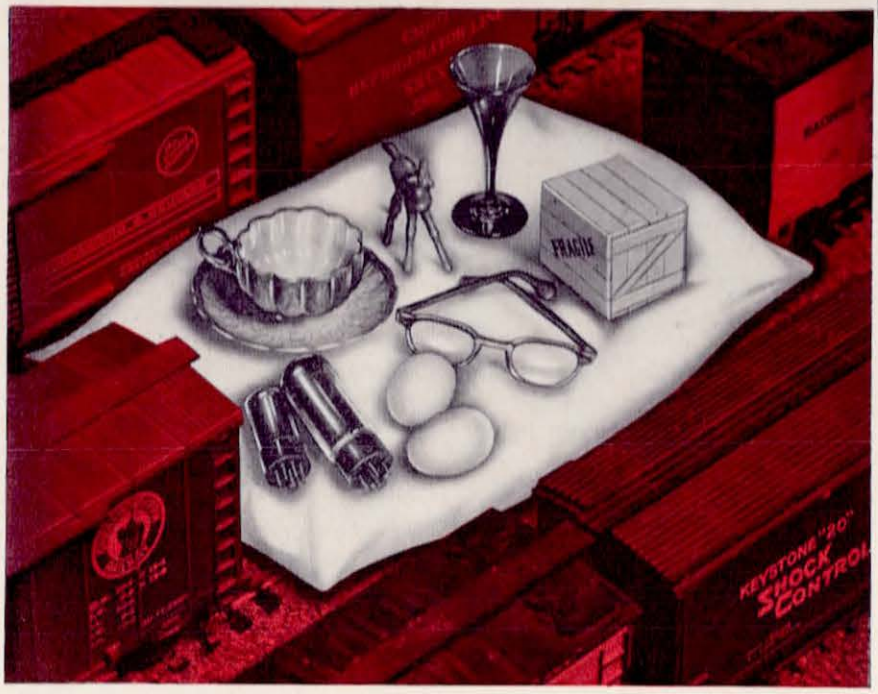

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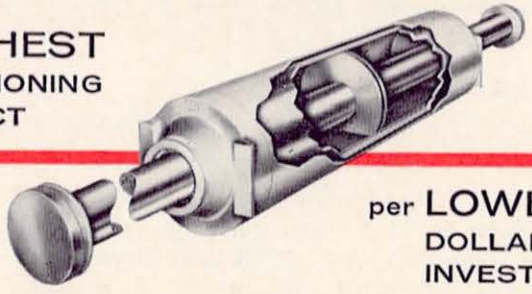

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Herring

► **The Story at a Glance: Commissioner Herring of the ICC, who has been assigned to the Commission's piggybacking investigation, said last week that Commission inquiries have already disclosed "a number" of piggybacking practices which "appear to require modification, discontinuance or uniform application." At the same time, the commisisoner also said it does not appear to him that "the vast investment of the rail industry and leasing companies in piggyback equipment will be jeopardized one iota if the Commission attempts to achieve an equitable application of the benefits of TOFC service to the regulated motor carrier and private shipper, as well as between the railroads."**

Piggybacking practices and procedures which he thinks require "clarification or uniform rules" were discussed by Commissioner Herring of the ICC in a Sept. 14 address before the annual meeting of the Iowa Motor Truck Association in Des Moines.

With Commissioner Tucker, Mr. Herring will conduct (on Oct. 9) the pre-hearing conference in connection with the piggybacking investigation. The investigation is the Ex Parte 230 inquiry launched by the Commission by its order of June 29 (RA, July 9, p. 7). The order made the investigation broad enough to include reconsideration of piggybacking issues resolved more than eight years ago in the New Haven case. Generally, the railroads oppose going over this ground again, but the truckers want the inquiry to remain a broad one (RA, Sept. 10, p. 44). As to his view that there is need for "clarification or uniform rules," Commissioner Herring had this to say:

"Some railroads in their divisions sheets covering Plan I service include therein a charge for the loading, unloading and tie-down of a trailer. Others do not have this provision but require that these services be performed by the motor carrier itself or by agreement with an independent contractor performing them for the railroad. Because of the lack of uniformity, a motor carrier using Plan I is not always in the position to determine the party with whom it must deal, particularly where an independent contractor is involved. This also leads to questions of liability in the event of damage to equipment while being loaded or unloaded.

"We have determined that certain railroads will accept trailers on different days from the same shipper or

Sees Need For TOFC Reform

carrier, and then charge the reduced rate for the movement of multiple trailers as though they were tendered all at the same time. Also, under Plan I different charges have been assessed different carriers for the identical movement of trailers between the same points.

"Then, too, there is the question of the expansion of a railroad's terminal area to serve shippers not on its line but on the line of another railroad, thus invading the competing carrier's territory. Also, there remains to be determined what operating rights are necessary under Plans I and V, and the degree of circuity a motor carrier may circumvent in using TOFC in place of an authorized highway route.

"Of immediate importance is the occasional failure of shippers to notify a railroad in advance that dangerous articles are to move in the trailer so that the car can be placarded and the trailer properly placed on the train."

The Commission instituted the investigation, Mr. Herring said, after it had become apparent that "certain fair and equitable ground rules for utilization of piggyback would be desirable, not with the intention of stifling coordinated transportation but so that it may be encouraged and expanded, and directed in the interest of the nation's entire common carrier industry." The commissioner also said that "some parties reacted unfavorably" when the investigation was announced; but, he added, "generally those of the industry who were aware of the problems and the difficulties welcomed the rule-making procedure."

Commissioner Herring also discussed the so-called Kennedy bills which would implement recommendations of the President's transportation message. He explained the Commission's position which favors some of the Presidential proposals but opposes what the railroads consider the heart of the program, i.e., the proposal to end the Commission's power to regulate minimum rates for the transportation of commodities in bulk and agricultural and fishery products.

Mr. Herring's argument against such rate-making freedom included references to past rate wars between railroads and between intercoastal water carriers. "A third round of depressed rates affecting rail, highway and water carriers," the commissioner added, "may be too much to save the private enterprise status of transportation which your government has always supported."

Harriman Winners Announced

Awards for outstanding safety records in 1961 will be presented to six line-haul railroads at special ceremonies in the Hotel Roosevelt, New York City, Sept. 19. Certificates of commendation will be awarded to two switching and terminal companies and the Pullman Co.

The dinner meeting will mark the 43d annual presentation of the E. H. Harriman Memorial Awards, established in 1913 in honor of the railroad pioneer. Commisioner Everett Hutchinson of the ICC will make the presentations on behalf of the American Museum of Safety.

Gold medal awards will go to the three lines operating both freight and passenger services which had the best over-all safety records—including the Nickel Plate, large lines; the Gulf, Mobile & Ohio, medium-sized companies; and the Bangor & Aroostook, smaller lines.

Three railroads handling freight only will be awarded certificates of commendation for scoring the highest safety marks in their respective geographic areas. They are the Elgin, Joliet & Eastern, eastern division; the Piedmont & Northern, southern division; and the Quanah, Acme & Pacific, western division.

The Pullman Co. will receive a special award for a decade of passenger service without a fatality. The Kentucky & Indiana Terminal Railroad of Louisville, and the Oahu Railway & Land Co. of Honolulu, Hawaii, will receive certificates in the switching and terminal company category.

Winners of the awards were selected by the Harriman Awards Committee of the American Museum of Safety. James G. Lyne, editor of Railway Age, is awards committee chairman.

More than 200 railroad executives and leaders in the railroad and safety fields are expected to attend the ceremonies, which will be presided over by Thomas N. Boate, president of the American Museum of Safety.

'Human Failure' Cited by ICC In Northern Pacific Derailment

The derailment of Northern Pacific's "North Coast Limited" near Evaro, Mont., on June 10, which killed a child and injured 272 other passengers, has been blamed on "culpable human failure and not mechanical failure" by Interstate Commerce Commission investigators.

Four locomotive units and the first 14 cars of the 17-car Seattle-to-Chicago train left the tracks on a curve where railroad regulations limit speeds to 30 mph. A recording device in the lead locomotive unit registered a speed of 87 mph at the time of derailment.

According to the ICC report, "the train was being operated at speeds considerably in excess of the maximum authorized speeds as it approached the summit at Evaro and proceeded on the descending grade. As the train was moving with throttle open on the descending grade and the curve involved, its speed was in excess of the theoretical overturning speed for the locomotive units on this curve."

Blood samples were taken from both the engineer and fireman about 5½ hours after the accident. According to a standard medical formula for measuring alcohol in the blood stream, it was estimated that about five minutes before the accident the engineer's blood contained approximately .153 grams of

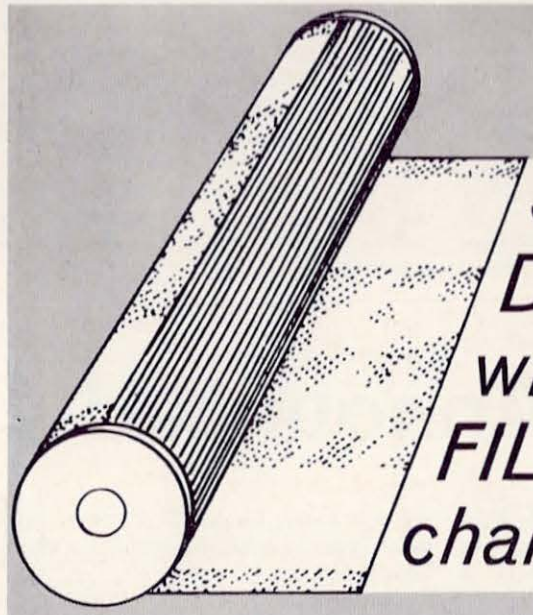
alcohol per 100 cc, and the fireman's blood .088 grams per 100 cc. Under Montana State law, a person is considered "under the influence of intoxicating liquor" when there are .150 grams or more of alcohol per 100 cc of blood.

The two crewmen told railroad investigators they visited two bars, where each drank one bottle of beer apiece, and then rested "little more than an hour" before boarding the train to relieve the incoming crew at Paradise, Mont., at 3:20 a.m.

The ICC report states: "The preponderance of their testimony indicates that the engineer, and the fireman to a lesser degree, had consumed more beer at these two bars than admitted to at the investigation conducted by the carrier. . . ."

The report notes that "neither engineman . . . attempted to apply the dynamic brake, reverse the motors, or operate the fireman's emergency brake valve to stop the train or reduce the speed on the descending grade before the accident occurred. . . . The engineer did not sound the locomotive horn at any time to notify the trainmen of an emergency and to apply the brakes on the cars as prescribed by the carrier. . . ."

The report concluded: "It is apparent that because of their physical condition due to lack of sufficient rest together with the effects from the beverages consumed prior to going on duty at Paradise, the enginemen . . . relaxed into a condition of somnolence as the train moved on the ascending grade in approach to the summit at Evaro, and thereby failed to control the speed as the train proceeded over the summit and on the descending grade to the point where the accident occurred."



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Water Transport: 'Cheap' for Whom?

Myron B. Phipps, executive vice president of the Nickel Plate, tossed a question last week to waterway operators, though he didn't indicate he expected an answer.

"They [waterway interests] maintain barges keep rates low and everyone benefits. If that is so, and they believe rates should be kept low, why do they spend so much time before the Interstate Commerce Commision opposing rate reductions proposed by the railroads?"

The whole idea of "cheap water transportation," Mr. Phipps suggested in an address before the Allegheny Regional Shippers Advisory Board at Canton, Ohio, Sept. 12, is a myth that can't survive close scrutiny.

He took note of the waterway operators' reaction to President Kennedy's recommendation for a two-cents-a-gallon fuel tax on inland water carriers—a tax that "would cost them less than $10 million a year, compared with the $70 million our government spends annually to maintain the waterway system."

"These waterway people admit fear that the two-cent tax would be just an 'entering wedge' . . . that sooner or later the government would want them to pay their own way . . . that the taxpayer would be relieved of this subsidy . . . in short, that the so-called cheap water transportation would have to stand on its own economic merits."

The protected situation of water carriers was among the inequities in the transportation system which Mr. Phipps warned would lead to nationalization of railroads if not corrected. His personal view is that there's a good chance that long-overdue reforms are on the way. If the present Congress doesn't act on President Kennedy's transportation recommendations, he said, "the next one will."

PEOPLE IN THE NEWS

ALASKA.—The title of **J. P. Triber** has been changed from traffic manager—sales and service, to traffic manager—rate research and service, Anchorage, Alaska.

BALTIMORE & OHIO.—Clarence H. Dick appointed division sales manager, Wheeling, W. Va., succeeding the late **E. Ralph Cross. William R. Lewis** named district sales representative, Kansas City, Mo., succeeding Mr. Dick.

CANADIAN NATIONAL.—Marc R. Meunier, assistant manager, Montreal area, appointed special assistant to **F. A. Gaffney,** vice president of highway services, Montreal.

W. J. Morton, assistant general manager, sleeping, dining and parlor car department, retired after 43 years with the CN.

CANADIAN PACIFIC.—J. R. Sproson, purchasing agent, Montreal, Que., and **D. Fahey,** assistant purchasing agent there, both appointed assistants to general purchasing agent, Montreal. **R. C. Murdoch,** assistant purchasing agent, Toronto, Ont., transferred to Montreal. **H. S. Robertson,** chief clerk, Montreal, named assistant purchasing agent, Toronto.

CHESAPEAKE & OHIO.—E. P. Whitfield, trainmaster, Covington, Ky., appointed assistant superintendent — trainmaster, Cincinnati Subdivision, at that point. **K. B. Robertson,** trainmaster, Stevens, Ky., named terminal trainmaster, Cincinnati Terminal, at that point. Abolished former positions of Messrs. Whitfield and Robertson and that of trainmaster at Cheviot, Ohio, formerly held by the late **E. C. St. George.** Jurisdiction of **L. H. Lucas,** trainmaster, Russell, Ky., extended westward to cover that part of the Cincinnati Subdivision up to and including South Portsmouth, Ky., in addition to his present jurisdiction over the Russell Subdivision. **P. T. Lawson,** assistant trainmaster, appointed night terminal trainmaster, Cincinnati Terminal, Stevens, Ky., and his former position abolished.

J. A. Livesay appointed general agent, Charlottesville, Va., succeeding **J. D. Mastin,** retired.

H. E. Boster appointed general foreman—piers, Newport News, Va. **U. G. Clemons** named general foreman, Hinton, W. Va., succeeding **J. H. Marks,** retired.

CHICAGO SOUTH SHORE & SOUTH BEND.—Harold W. Carlson, formerly district passenger sales manager, **New York Central,** named to the newly created position of assistant general passenger agent, CSS&SB.

Herbert L. Fehner named assistant general attorney, Michigan City, Ind., and will handle personal injury claims and litigation. Mr. Fehner has been in general practice in Gary, Ind. He will work under supervision of **J. M. Seabright,** who was recalled from retirement as general attorney upon the death on Aug. 1 of **K. C. Raub.**

DETROIT & TOLEDO SHORE LINE.—Charles L. Border appointed assistant trainmaster, Trenton, Mich.

DETROIT, TOLEDO & IRONTON.—Thomas P. Wall appointed general agent, Cleveland, to replace the late **Rudy C. Kluiber.**

ILLINOIS CENTRAL.—M. A. Sheahan appointed general statistician, Chicago, to replace **D.R. LeRoy,** who retires Sept. 30.

LOUISVILLE & NASHVILLE.—Howard C. Forman, assistant to president, Louisville, Ky., retired Aug. 31.

MIDLAND CONTINENTAL.—W. A. Taft appointed general manager, Jamestown, N.D., succeeding **L. T. Wright,** who continues as president. Mr. Taft was formerly division superintendent, **Soo Line,** Enderlin, N. D.

NEW YORK CENTRAL.—Joseph R. Spina, real estate assistant, New York, appointed real estate agent.

Clifford J. Thompson, district freight salesman, Denver, Colo., appointed district freight sales manager there. **Del F. Harbaugh,** district freight salesman, Omaha, Neb., promoted to district freight sales manager there. **Jack W. Ringwood,** division freight sales manager, Peoria, transferred to Dayton, Ohio. **Raymond K. Carroll,** assistant coal sales manager, Cincinnati, promoted to coal sales manager there.

Otto W. Eisele named administrative assistant to the assistant vice president—sales and service, New York.

NIAGARA JUNCTION.—Eman Maulis, Jr., appointed superintendent of the road at Niagara Falls, succeeding **Norbert J. Fitzgerald,** retired. **Dennison J. Courtney** named trainmaster there.

NORTHWESTERN PACIFIC.—Frederick L. Schorcht, traveling freight and passenger agent, **Southern Pacific,** Redding, Calif., appointed district freight agent, NWP, San Francisco, replacing **W. G. Crocket,** retired (RA, Sept. 10, p. 58).

READING.—Allen Lesley and **William P. Quinn** appointed general attorneys, Philadelphia, Pa. Mr. Lesley was formerly assistant general counsel and Mr. Quinn was assistant general attorney. **Robert J. Williams** and **James E. Frick** appointed assistant general attorneys. Mr. Williams joined the Reading in 1958 as attorney. Mr. Frick joined the road in 1951 as personnel assistant.

SANTA FE.—Raymond D. Shelton, assistant vice president, Chicago, appointed vice president—operations there, to succeed **Clarence R. Tucker,** retired (RA, Sept. 10, p. 58).

SEABOARD.—W. E. Holland, Jr., and **J. L. Williams** appointed assistants to general purchasing agent, Richmond. Mr. Holland was formerly special assistant, purchasing department. Mr. Williams was assistant to general storekeeper.

SOUTHERN.—Herbert W. Bondurant, vice president, Atlanta, Ga., retired Aug. 1 after more than 49 years of service. **Charles M. Kimball,** assistant to vice president—safety, Washington, D.C. retired July 1. **Lonnie I. McNutt,** general superintendent transportation, Washington, retired Aug. 1.

SOUTHERN PACIFIC.—C. L. Bridgforth, B. H. Carpenter and **J. L. Young** appointed assistant superintendents of safety, Houston, Tex.

Kenneth I. Dunlap named manager of the time service bureau, San Francisco, replacing **Clarence D. Fabrin,** retired (RA, Sept. 10, p. 58).

Deryl B. Zumwalt, senior assistant division engineer, San Joaquin division, Bakersfield, Calif., appointed division engineer, Tucson division, Tucson, Ariz., to replace **Leland E. Lyon,** named principal assistant division engineer, Western division, Oakland, Calif. **James C. Strong** succeeds Mr. Zumwalt.

Marc R. Meunier
CN

Raymond D. Shelton
Santa Fe

UNION PACIFIC.—Ronald W. McIntosh, chief clerk, freight rate department, Portland, Ore., named assistant general freight agent there, replacing **John C. Stromberg,** who has taken a two-year leave of absence during which he will serve as research analyst for the Western Traffic Assn. of Transcontinental Railroads, Chicago.

E. L. Cochran, division storekeeper, Cheyenne, Wyo., appointed assistant general storekeeper, Omaha, Neb., succeeding **F. E. Ranslem,** named assistant general purchasing agent, Omaha. **E. L. Waples** also appointed assistant general purchasing agent, Omaha.

Supply Trade

Harry O. Bercher, executive vice president, **International Harvester Co.,** has become president and chief executive officer, succeeding **Frank W. Jenks,** who retired Aug. 31.

Railway Maintenance Corp. has named **Donald J. Hogan & Co.** as exclusive Chicago area representative.

L. J. Davis, Jr., manager transportation marketing, **Union Switch & Signal division of Westinghouse Air Brake Co.,** Swissvale, Pa., has been appointed marketing manager of the division, effective Sept. 10.

Sparton Railway Equipment, division of **Sparton Corp.,** has appointed **Roy J. Anderson** as central region sales manager at Chicago. Mr. Anderson was formerly a district sales manager for the Firestone Tire & Rubber Co.

Charles M. Pigott has been elected executive vice president, **Pacific Car & Foundry Co.,** Seattle, Wash. Mr. Pigott was formerly assistant vice president and assistant general manager in charge of manufacturing operations, Renton Division.

Bernard T. Olson has been appointed vice president and Southeastern area manager at the newly established offices of **Motorola Communications & Electronics, Inc.,** in Atlanta, Ga.

Walter C. Weathersby has joined the sales organization of **C & D Batteries, Division The Electric Autolite Co.,** Conshohocken, Pa.

OBITUARY

Philipp J. Sesterhenn, 68, retired assistant general auditor, **Chicago & North Western,** died Sept. 5 in St. Francis Hospital, Evanston, Ill.

Harry W. Stetson, 83, retired general supervisor maintenance of way, **Maine Central,** died early this month at his home in South Portland, Me.

YOU OUGHT TO KNOW

Trucking industry's attack on bills to implement President Kennedy's transportation proposals is due this week, when highway interests testify before the Senate Commerce Committee. This will be the truckers' first appearance at Congressional hearings on the Presidential proposals, most important of which would end minimum rate regulation for transportation of commodities in bulk and agricultural and fishery products. The Senate committee last week received the opposition presentation of the water carrier industry. It was like that which the water carriers made last month before the House Committee on Interstate and Foreign Commerce (RA, Aug. 13, p. 43; Aug. 20, p. 29).

Thirty-nine railroads operated with over 1,000,000 miles per hotbox setoff between terminals in June, according to reports submitted to the AAR Mechanical Division. National average in June was 938,576 miles per setoff, down slightly from the previous two months but up from the June 1961 figure. Railroads with top performance were Delaware & Hudson, 3,507,382 miles per setoff; Denver & Rio Grande Western, 3,366,435 miles; and the Clinchfield, 3,253,051 miles.

The Pennsylvania now owns 75.24% of the outstanding Lehigh Valley stock as a result of a recent exchange offer to Lehigh stockholders. According to David C. Bevan, PRR vice president, finance, the PRR had received for exchange a total of 466,170 shares of Lehigh common as of Friday, Sept. 7.

E. P. Gangewere, president of the Reading, will be the principal speaker at the ninth annual conference of District 1, National Association of Railway Business Women, Sept. 29-30, in the Warwick Hotel, Philadelphia. His topic will be: "The Vital Role of Railroad Women."

Railway Labor's Political League has endorsed Edward J. McCormack, Jr., for U.S. Senator in the Democratic primary in Massachusetts, Sept. 18. Mr. McCormack's opponent: Edward Kennedy, younger brother of the President. RLPL said it was backing Mr. McCormack on the basis of his progressive record and public service.

"The Panama Limited," Illinois Central's all-Pullman luxury train, is giving travelers a chance to see what it was like back in the heyday of opulent dining car service. A new "King's Dinner" features such items as Gulf shrimp, crab fingers, imported wine, a fish course, steak, hot breads, "heady" cheese and after-dinner liqueurs. The tab for the epicurean experience is $9.85.

Transportation urgently needs more application of the principles of engineering economics (plus the development of new ones), Prof. Vincent J. Roggeveen of Stanford University told members of the Transportation Research Forum of New York last week. Too often, he said, the principles are forgotten, ignored or misused in the study of alternative projects requiring capital investment which leads to management's final decision-making. Railroads are guilty of this failure, he charged—but it was in describing the situation in government-agency deliberations that Prof. Roggeveen resorted to his most colorful adjective: "Ghastly."

"It's crisis time and this is a crisis convention," International President A. Philip Randolph told the 10,000 - member U.S. - Canadian Brotherhood of Sleeping Car Porters (CLC-AFL-CIO) meeting last week in Montreal for its fourth triennial convention. Theme of the session, the first ever held outside of the U.S.: "crusade for shorter work month, job protection and stabilization."

Fear of ICC merger action after Congress adjourns has spurred Chairman G. E. Leighty of the Railway Labor Executives' Association to renew his call for immediate enactment of the Kefauver moratorium bill. He based his stand on the belief "that the ICC will move so fast after Congress adjourns that any remedial action by the next Congress will be foreclosed. The merger process then will be so far along that halting by Congressional action will be a practical impossibility."

"Some Pitfalls of Private Carriage" is the topic of an address which L. E. Galaspie, director of traffic, Reynolds Metals Co., is scheduled to deliver during the Oct. 7-9 meeting of the American Trucking Associations' Common Carrier Conference—Irregular Route at the Conrad Hilton Hotel in Chicago.

Sen. Estes Kefauver will address an RLEA-sponsored railroad workers' rally Sept. 20 at Manhattan Center, New York. Themes of the meeting: union opposition to the PRR-NYC merger and to the carriers' position on work rules changes. Also scheduled to speak: George M. Harrison, president of the Clerks organization; and H. E. Gilbert, president of the BLF&E.

The Suffolk County (N.Y.) Industrial Commission covered a lot of ground at its bi-monthly meeting September 12 when it rode a special Long Island Railroad train to inspect the latest industrial developments along a 60-mile route. The only agency of its kind in New York State, the Commission is composed of business and civic leaders interested in charting an orderly course for Suffolk County's future growth. Population of the area is expected to jump from 700,000 to more than two million by 1985.

Thirty days of rail travel for a flat fee of $117.60 is being offered to foreign tourists by Indian Railways, effective Sept. 1. The "travel as you like" plan has been instituted as both a cost-cutter and a time-saver for foreign visitors to India.

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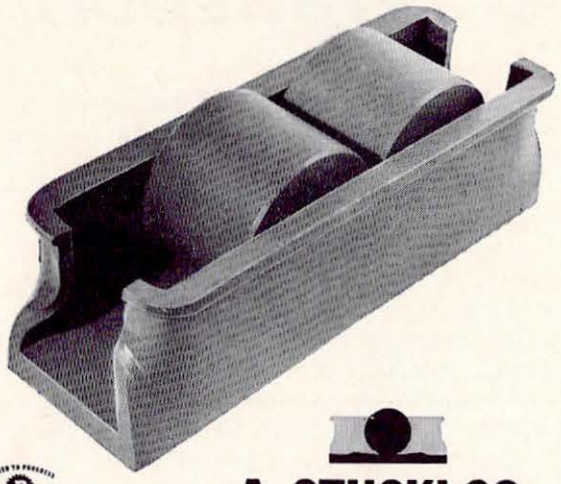

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Planned Chaos In Transport

It is the practice of barge operators to insist that railroad rate-making be done with so-called "fully distributed costs" as a "floor." At the same time, they are equally insistent that the great bulk of the constant costs of barge service (i.e., the contribution of the taxpayers in building and maintaining waterways) be omitted in computing the economic cost of barge service. It would be hard to imagine a more illogical position—but, so far, they seem to be getting away with it.

Actually—in measuring the economics of two forms of transportation—it is the "incremental," or "marginal," or "out-of-pocket" costs that ought to be compared. But, in any event—whatever category of costs is used—it is self-evident that, in comparing two modes, the same category of costs must be applied to both. If two fellows are in a footrace, and one of them hitches a ride on the way, the timekeepers have to take that fact into account in computing his actual speed afoot—compared with that of the fellow who didn't get a lift.

Calculating railroad and barge costs on the same basis is exactly what was done in testimony recently presented by Southern's Vice President R. S. Hamilton in his road's grain rate case, now in litigation. Pointing out the deficiencies of "fully distributed costs" as a yardstick, Mr. Hamilton nevertheless proceeded to compare railway costs on this basis with barge line costs on exactly the same basis. To compile such figures for barge transportation, of course, he added the taxpayers' contribution to the costs incurred directly by the barge operators.

$5.10 a Ton from Taxpayers

The taxpayers' contribution to barge transportation costs was shown to be $2.55 per ton from St. Louis to Decatur, Ala., and ranged upward to $5.10 per ton from St. Louis to Knoxville. For every move examined, when the taxpayers' contribution was added to the direct expense incurred by the barge operators, a total cost per ton was shown in excess of the total cost of railroad transportation.

This evidence clearly demonstrated that an economically cockeyed theory of railroad rate regulation is being advocated by the Southern's opponents in this case. Even more dramatically, perhaps, it also showed that billions of dollars of taxpayers' money are being used to divert transportation from economically efficient railroads to economically wasteful barge movement.

All over America rivers are being deepened, locks being built and enlarged—all for the specific purpose and inevitable result of increasing the total cost of transportation to the American people. What's gone wrong anyhow?

The origin of this folly is easily discernible by any careful observer. It arises from (1) the federal government's compartmentalized planning of transportation development and (2) profligate capital outlays of tax money for transportation plant in government ownership, while railroads are left to their own shrinking resources to find whatever funds they can for renewal and improvement.

Railroad managements are confronted with a dilemma in this situation to which no one has yet come forward with an effective answer. It is not just a problem of protecting railroad investors and employees from erosion of earnings and jobs. Even more important, there is the public interest and national military safety to be considered. What is needed is a system of dealing with all forms of transportation which will encourage traffic to seek the channels of minimum cost. This can never happen under the present regime of gigantic federal expenditures for highway, water and air transport—each agency doing its planning and spending as if no other form of transportation existed.

A parallel situation developed earlier in urban passenger transportation—where the total highway subsidy to a private motorist, commuting to and from work in a big city, has been calculated as high as $5 per day. No system of self-supporting mass transportation could hold its own under subsidies to private transportation of such magnitude—and the result has been that urban mass transportation has been more and more socialized (to give it a chance to survive by enabling it, too, to get in on some of the taxpayers' generous handouts).

Certainly, nobody in his right mind wants to see an outcome like this in standard railroad transportation. But that is the threat which grows larger every day that government continues pouring money into non-railroad transportation facilities, with no consideration whatever of the relative economic merit of these expenditures (compared with those for other modes of transportation), and without exacting fully compensatory payments from users.

The leaders of the railroad industry—including manufacturers of railway equipment and materials—are the nation's custodians of its priceless transportation technology, actual and potential. Quite apart from their duty to their investors and employees, they have an even deeper moral obligation to the national welfare and military security. The nation should support them when they do their utmost to prevent the sidetracking of this unsurpassed technology—wherever fair economic comparisons can easily prove its superiority to other methods of movement.

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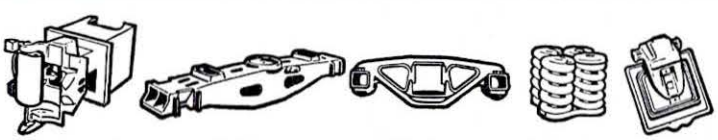

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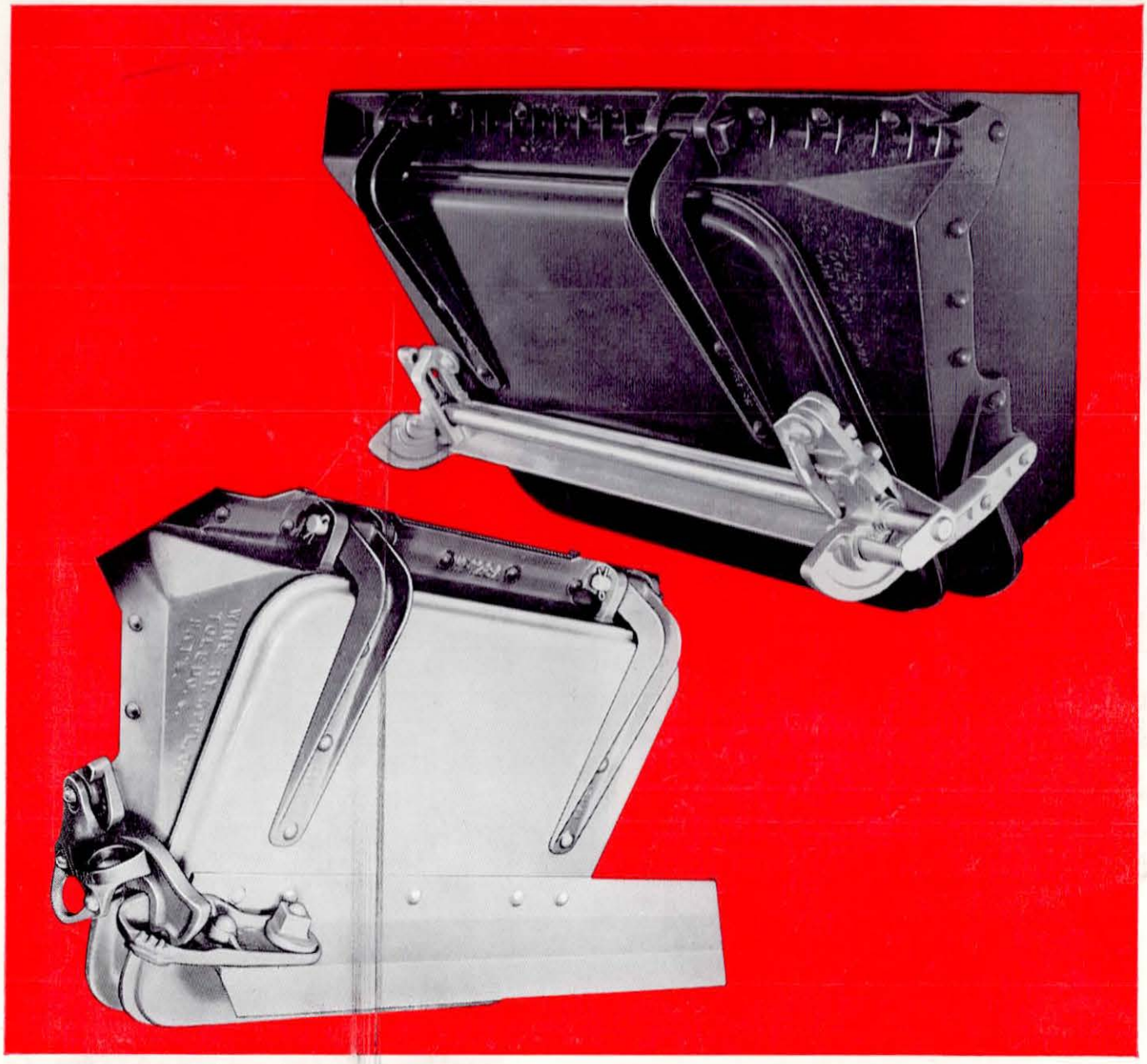

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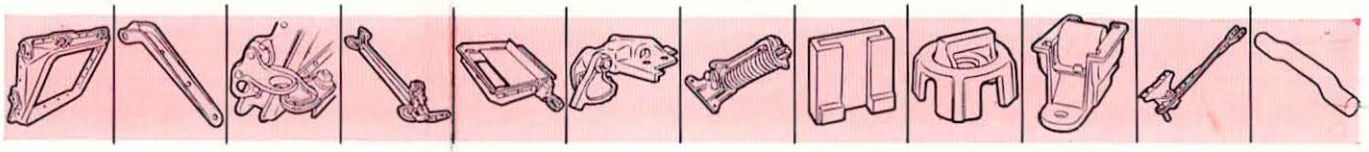

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